EVALUATING THE EFFECTIVENESS OF EMPLOYMENT-RELATED PROGRAMS AND SERVICES FOR YOUTH

A research report to:

Human Resources Development Canada

Submitted by:

Social Research and Demonstration Corporation

November 1996

CONTENTS

Page

Chapter 1: Introduction 1
Saul Schwartz

Chapter 2: Profile of the Youth Labour Market 7
Gordon Betcherman and Norm Leckie

Chapter 3: Evidence on the Effectiveness of Youth Labour Market Programs in Canada: An Assessment 28
W. Craig Riddell

Chapter 4: What Works? Evidence from Evaluation Research on Programs for Disadvantaged Youths in the United States 54
David A. Long

Chapter 5: Evidence on the Effectiveness of Youth Labour Market Programs in Australia and the United Kingdom 86
John A. Burns and Vanessa Thomas

Chapter 6: Conclusions – Lessons Learned on the Effectiveness of Programs and Services for Youth 98
John Greenwood

Foreword

This study was prepared under a contract with the Evaluation and Data Development Branch, Human Resources Development Canada (HRDC) to support the work of the Ministerial Task Force on Youth. The papers which follow benefited from comments provided by Audra Bowlus, Department of Economics, University of Western Ontario, Harvey Krahn, Department of Sociology, University of Alberta; Lars Osberg, Department of Economics, Dalhousie University; Marc Van Audenrode, Département d'Économique, Université Laval; and Paul Kingwell and Shirley Fullarton, HRDC. An initial summary of the Canadian evaluation studies was compiled by Dr. Harry MacKay.

103-00721/

Chapter 1

Introduction

Saul Schwartz
Carleton University

For those who watch from afar – policy-makers, politicians, parents – the calculus of risk and reward attending the efforts of young workers has shifted significantly in the past twenty years. The rewards for success – stable, highly-paid and intellectually-fulfilling work – seem greater than before but far less certain. The alternatives to such success for the unlucky, and for those unable or unwilling to compete for positions in the labour market elite, have become less certain. No longer does a strong back and a will to work guarantee steady employment.

"Uncertainty" is now a constant.

What must a young person do to succeed? To be sure, education is necessary for labour market success but it is clearly not sufficient. Where once a university degree virtually guaranteed a steady, middle-class income, we can now point to a large number of unemployed or underemployed graduates. Where once high school drop-outs might have found steady unskilled work in factories, in mines or on the ocean, they now must work – if they can find work at all – in low-paid, high-turnover service sector jobs. Young people have always faced the formidable challenge of discovering their capabilities and skills. Now they must also guess at which skills might remain in demand by future employers.

Symptomatic of the increased uncertainty facing young workers is the misnamed "school-to-work transition." In some imaginary or long-since vanished labour market, Canadians went to school until they stopped and, upon stopping, took up full-time work. In today's labour market, many students work and many workers study, so that the line between school and work has become quite blurred.

The next chapter of this report presents a snapshot of the youth labour market up to the middle of this decade. The overview prepared by Gordon Betcherman and Norm Leckie uses a few simple labour market indicators – labour force participation rates, unemployment rates, participation in school or adult training – to show that there is cause for serious concern about changes in the operation of the youth labour market. To be sure, the job market for young people has long been "worse" than it is for adults: labour force participation rates are lower and unemployment rates are higher. At any point in time, a smaller proportion of young people are working or looking for work because some are in school or raising young children. And those who are in the labour market are more

likely to be unemployed, since some will be moving from job to job, hoping to find one that is both steady and satisfying.

Using data from Statistics Canada, Betcherman and Leckie show that the youth labour force participation rate, that fell dramatically during the last recession, has been continuing to decline during the current recovery. And, while the gap between the unemployment rates for youth and adults widened during the recession (as would be expected), that gap has failed to close in the post-recession period. While their conclusion that the economic recovery of the 1990s seems to have bypassed youth may perhaps be too strong,[1] there is reason to be concerned by these trends. In particular, the industrial pattern of the jobs held by young people has also changed, so that an increased concentration of youth is evident in industries (such as retail trade and personal services) that are often characterized by relatively low wages, poor benefit coverage, a high incidence of contingent work, and many part-time jobs.

It is well known that, on average, young people with more education are in a better position than those with less. However, over the period from 1980 to 1995 the importance of education rose. In 1994, the unemployment rate for university graduates was 8.6 percent, while, at the other end of the educational spectrum, the unemployment rate was 27.9 percent for those with 0 to 8 years of education and 22.1 percent for those who went to high school but did not graduate. Betcherman and Leckie point out that the worsening employment situation of young people is particularly pronounced among poorly-educated youth and suggest that education is becoming increasingly important as a "sorter" in the labour market.

If we look beyond the more standard labour market indicators, we get some glimpses of two relatively new features of youth labour markets – the increased uncertainty of employment and increased underemployment.

Part of the uncertainty of employment might be captured by looking at the volatility of earnings for young people. If uncertainty is increasing, we should see young people moving from job to job and from higher-paying to lower-paying jobs, and back. We might also see individuals moving into and out of the labour force, or initially working part time and then full time. These so-called "labour force dynamics" are difficult to analyze in Canada because of the lack of time series labour force data. It is difficult to know if young people now hold more jobs of shorter duration, or if workers are cycling between "good jobs" and "bad jobs", or if periods of unemployment are more or less common unless we are able to systematically "watch" the careers of a group of Canadians unfold. Nonetheless, both longitudinal tax data and the National Graduate

---

[1] In addition, the reasons for the continuing decline in the youth participation rate are not clear – some people may be choosing to leave the labour market to go to school full time or to raise families. Moreover, the youth unemployment rate *has*, in fact, declined in the post-recessionary period, it just has not declined as much as might have been expected based on the experience of the past.

Survey can be used to shed some light on the extent to which the working lives of young people have become more uncertain.[2]

Anecdotes about underemployment are quite common. While we have all heard stories of Ph.D.'s driving taxis and English majors tending bar, actually measuring the extent of underemployment, and judging whether it has increased or decreased in recent years, is quite difficult. For every welder driving a truck, there is an accountant working as a middle-level manager; for every Arts major waiting tables, there is a Social Science major turned construction contractor. "Underemployment" is clearly quite subjective. Much more work remains to be done in this area.

The examination of the youth labour market helps us to understand the intellectual motivation for the youth initiatives mounted by governments. The "school-to-work transition" has been the focus of a number of HRDC programs over the past two decades. However, the increase in involuntary part-time work among youth and the fall in their labour force participation suggests that the problem remains. Similarly, the greater importance of high school graduation might justify efforts such as the Stay-in-School Initiative.

The principal purpose of this report is to review evaluation studies dealing with a number of programs – in Canada and elsewhere – that have tried to address the employment-related problems of young people. This is done in three separate chapters: Craig Riddell examines Canadian studies, David Long deals with American experimental evaluations, and John Burns and Vanessa Thomas summarize information from Australia and the United Kingdom.

In examining program effectiveness, our principal interest is employment-related impacts. In some cases, programs have been successful in producing intermediate outcomes, such as higher educational attainment or a reduction in anti-social behaviour (e.g., involvement in criminal activity). However, the main focus here is on whether programs produce positive results in terms of labour market outcomes – mainly increases in employment and earnings.

The education and training programs discussed here are aimed at young workers. But the employment success of such workers is also affected by other important factors. First, these programs operate on the "supply side" of the market, while the employment of young people is also clearly affected by what is happening on the demand side and by other government policies with other objectives (including deficit reduction and price stability) that may dampen the overall level of economic activity. Perhaps by the middle of the next decade, as today's young people settle into jobs once occupied by baby-boomers, they will enjoy the fruits of such policies. But, like so much of the lives of young people today, these longer-run benefits look uncertain.

---

[2] Ross Finnie of Statistics Canada and the School of Public Administration at Carleton University is engaged in on-going work in these areas using these data sources. I thank him for pointing out the potential usefulness of those data sets for studying volatility.

Second, an increasing body of evidence suggests that early intervention – as early as the pre-school period – can prevent the occurrence of later problems. In Canada, that evidence is most closely associated with the work of the McMaster University psychiatrist Dan Offord. The problems that we try to solve in the "repair shop" of education and training programs may actually originate at very early ages and may be more fruitfully addressed at that time.

In reviewing the findings of evaluation studies, we would want, ideally, to focus on those that have used rigorous methodologies and, in particular, those which have estimated program impacts, rather than those which simply provide formative assessments or descriptive analyses. Common sense lies at the heart of all evaluation research. Before a program can be evaluated, the desired outcomes and the time period over which the occurrence of those outcomes will be measured must be specified. Then, we must "compare comparables," which leads to the use of comparison groups and a variety of complicated methods for adjusting for selection bias.

In light of the evolution of evaluation techniques over the past couple of decades, it is perhaps not too surprising that the program evaluation studies reviewed for this report employ a wide range of methodologies. However, the variation in the reliability of the findings from such diverse studies increases the difficulty of generalizing from the reported results. Some studies do not even attempt to generate comparison groups and estimate impacts. Other studies provide impact estimates that focus on the short-run effects at the expense of the long. Why should this be so?

First, when policy-makers feel certain that a program will accomplish its objective, a comparison group may be considered unnecessary. For example, summer jobs provided for young people in rural Newfoundland are almost certainly "incremental." All observers seem to agree that, absent the government-funded jobs, there would be no other jobs available.

Second, even if a goal of a program is the long-run improvement of employability and earnings, the study of such impacts may be difficult to organize. For example, as Riddell's summary of HRDC evaluations illustrates, a large number of employment programs have come and gone over the past fifteen years. It may be difficult to generate the resources and enthusiasm for studying the post-program success of trainees, ten years after their training, in an environment where both the program and its proponents may have long-since vanished.

Riddell's summary focuses our attention on the need to read evaluation reports not only to discover the "bottom-line" evidence on program impact but also to ascertain their credibility. Furthermore, we need more long-term studies of the type illustrated by HRDC's Longitudinal Study of Training. In this regard, there is a vast array of outcome information residing in the longitudinal tax data that could be exploited in conjunction with past program records.

Long's summary of American studies emphasizes the use experimental evaluations. There is little doubt that, in the US, experimental evaluation is now viewed as "best practice." The decision by the US federal government to mount an enormous and expensive experimental evaluation of its primary training program – the Job Training and Partnership Act – is a symptom of that methodological ascendancy.

An important, although often neglected, advantage of experimental evaluations is their simplicity. Even though they can often be lengthy and expensive, the basic procedures are simple and standardized and one can reasonably expect that different teams of evaluators will use essentially the same techniques. By contrast, in considering non-experimental evaluations, we must constantly worry about the size and composition of the comparison groups (or even their existence) and about the methods (if any) used to account for selection bias.

However, there remains substantial intellectual support for non-experimental methods, largely because experiments are atheoretic. They tell us if the program participants "did better" than non-participants but, by themselves, they cannot tell us why. If, as is often the case, the "program" is a range of services rather than a single intervention, no one experiment can say which of the various services was most important in producing the positive impact. For that reason, I believe that a non-experimental evaluation of any single program may well be equal to, or better than, an experimental evaluation. But for this to be true, the non-experimental evaluation must be in the hands of skilled analysts who have access to a rich set of pre- and post-program information and who operate with the same kind of time and money that are typically devoted to experiments.

HRDC's evaluations, while inevitably imperfect, have at least benefited from the central direction and accumulated experience of HRDC's Program Evaluation Branch in Ottawa. As Greenwood notes in the conclusion to this report: "HRDC's evaluations are second only to those in the United States in terms of their methodologies and the reliability of their findings."

That central direction and accumulated experience may well be lost, or its influence diminished, in the current process of passing responsibility for employment programs over to the provinces. If the provinces fail to use state-of-the-art evaluation methods (assuming they evaluate at all), then the credibility of program evaluations will be weakened.

However, the proposed devolution of programs is also an opportunity. The provinces may design programs that build on the lessons learned over the past decade. If these programs are then evaluated experimentally, we can amass a body of credible evidence that can inform the evaluation of those programs as we move into the twenty-first century.

Chapter 2

Profile of the Youth Labour Market

Gordon Betcherman and Norm Leckie*
Human Resource Group, Ekos Research Associates Inc.

INTRODUCTION

The current concern about youth employment has led to a commitment on the part of the federal government to introduce initiatives that will improve the situation of young Canadians in the labour market. Effective interventions will require a clear understanding of youth employment trends. They will also require a careful diagnosis of where specific problems exist and what types of interventions would improve the functioning of the youth labour market.

This paper provides an overview of labour market trends for Canada's youth.[3] We have combined both original analysis and a synthesis of existing research. A number of data sources are used and it should be noted that these involve various definitions of "youth." For the most part, the labour market statistics are based on the conventional 15-24 year-old age grouping. However, some other statistics are organized according to slightly different age categories. As well, some labour force data are presented for the 25-29 age group. These are included in response to the hypothesis that the school-to-work transition has been prolonged for many people.

We begin in the next section by reviewing the basic demographic and labour market trends for youth. Then we turn to the role of education as a determinant of employment outcomes. In the next section, we include a brief synthesis of the available labour market information about the 25-29 year-old group. Following this, we examine the industrial composition of youth employment, both current and historical. Then we turn to participation of youth in education and training activities. In the final substantive section, the evidence on youth wage trends is reviewed. We then offer brief conclusions.

---

* The authors would like to acknowledge the contributions of particular individuals at Ekos Research Associates: Melissa Bulin (research), Heather Chang and Ken Cheung (computers), and Diane Beauvais and Lise Paquette (word processing).

[3] For an expanded version of this paper, see Betcherman and Leckie (forthcoming).

THE YOUTH LABOUR MARKET

Youth Population and Labour Force Trends

Table 1 provides a summary of the youth population and labour force trends for selected years between 1980 and 1995. As Panel A indicates, the major demographic trend has been a decline in the youth population. In the mid-1970s, following the rapid growth in the size of the baby-boom generation, the 15-24 year-old cohort represented over one-quarter of the total population. With the subsequent "baby-bust," the size of the youth population fell dramatically. By 1995, the share of 15-24 year-olds in the total population was about 17.1 percent. Projections from Statistics Canada indicate that the flat trend for youth population will begin to turn modestly upward by the turn of the century.

TABLE 1
Youth Population and Labour Force Trends, by Age and Sex Groups, Selected Years, 1980-1995

	1980	1985	1990	1992	1995
PANEL A — POPULATION					
15-24 year-olds (000s)	4776	4465	3944	3924	3945
15-24 year-olds as % of total population	25.7	22.4	18.5	17.8	17.1
PANEL B — LABOUR FORCE					
15-24 year-olds (000s)	3239	3040	2730	2562	2454
15-24 year-olds as % of total labour force	27.0	23.2	19.1	17.7	16.4
PANEL C — PARTICIPATION RATES					
15-19 year-olds	55.4	53.2	57.5	52.1	48.7
20-24 year-olds	80.2	80.1	79.9	77.6	75.3
15-24 year-olds	67.8	68.1	69.2	65.3	62.2
Males	72.3	70.6	71.4	67.0	63.9
Females	63.3	65.5	67.0	63.6	60.5

Source: Calculations based on Labour Force Survey data (1996 revisions), Statistics Canada.

Youth labour force trends (Panel B) closely track population trends, with the youth share of the labour force falling from 27 percent in 1980 to 16 percent in 1995; in 1995, there were almost 800,000 fewer young persons in the labour force than in 1980. The labour force trends also reflect changing youth labour force participation patterns (Panel C). During the 1980s, the participation rate of 15-24 year-olds rose very slightly.[4] It declined dramatically in the 1990s, however, reaching 62.2 percent in 1995, its lowest level since 1976.[5] A decrease in youth labour force participation would be expected during periods of recession as a result of slack labour market conditions. In fact, youth participation rates decreased dramatically in the early 1990s and continued to fall in the post-recessionary period.

Employment and Unemployment

Youth employment trends are shown in Table 2. The youth share of total employment decreased from 25 percent in 1980 to 15 percent in 1995, a reflection, in large part, of demographic changes over the past two decades.

To control for demographic factors, we show employment-to-population ratios in Panel B. After a drop during the recession of the early 1980s, the youth employment-to-population ratio increased significantly for all sub-groups during the expansion of the second half of the 1980s. The ratio dropped again during the 1990-92 recession, reflecting both the decreasing labour force participation which we have already discussed, as well as rising unemployment rates which we will discuss below. Since 1992, the employment-to-population ratio has continued to fall despite decreases in the unemployment rate, suggesting that the decrease is the result of a continued drop in youth participation rates. Note as well the convergence in the employment rates for males and female youth over the period.

A major feature of the youth job picture has been an increase in part-time employment (Panel C of Table 2). Though part-time employment has become more prevalent for the labour force as a whole, the increase has been far more dramatic for youth than for adults aged 25 years and over. For example, among the adult population, the part-time share of employment rose about 2.3 percentage points over the 1980-95 period to just over 12 percent (not shown); however, the part-time share of employment among youth almost doubled over this period, reaching 45 percent of 15-24 year-olds in 1995. This increase occurred for both young men and young women.

---

4. See Sunter (1994) for a review of the labour force participation experiences of young people during the 1980s and 1990s. Sunter highlights the increasing participation of young females and the increase in the overall proportion of students holding part-time jobs as the major factors in the increased participation during the 1980s.

5. In fact, in 1991 the 15-24 year-old group's participation rate dropped below the rate for the population as a whole (not shown).

TABLE 2
Youth Employment Trends, by Age and Sex Groups,
Selected Years, 1980-1995

	1980	1985	1990	1992	1995
PANEL A — EMPLOYMENT					
15-24 year-olds (000s)	2816	2544	2384	2107	2072
15-24 year-olds as % of total employment	25.4	21.7	18.1	16.4	15.3
PANEL B — EMPLOYMENT-TO-POPULATION RATIO					
15-19 year-olds	46.4	43.2	49.4	41.8	39.7
20-24 year-olds	71.4	68.1	70.5	64.8	64.9
15-24 year-olds	59.0	57.0	60.4	53.7	52.5
Males	62.5	57.8	61.5	53.4	53.1
Females	55.4	56.1	59.4	54.0	51.9
PANEL C — PART-TIME EMPLOYMENT					
15-24 year-olds (000s)	665	815	867	902	932
15-24 year-olds' part-time employment as % of 15-24 year-olds' total employment	23.6	32.0	36.4	42.8	45.0

Source: Calculations based on Labour Force Survey data (1996 revision), Statistics Canada.

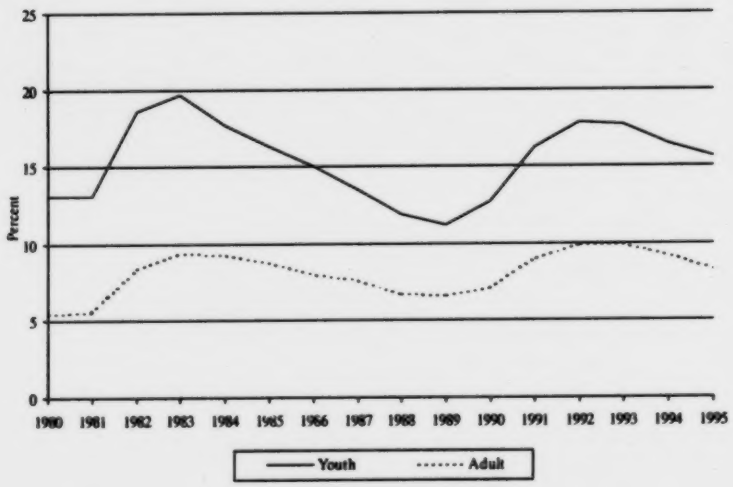
The growth in part-time employment among youth reflects a number of factors. For many young people, the line between school and work has become increasingly blurred, with growing numbers engaged in a combination of study and part-time employment (Krahn and Lowe, 1990). This trend will be exacerbated by increases in the number of years young people spend in school. Also, a slowdown in family income growth may have limited intra-family transfers, increasing the demand for part-time work among the young. At the same time, the growth of the service sector and the increasing workplace flexibility sought by employers have increased the demand for part-time work (Betcherman, 1995).

According to Statistics Canada's Labour Force Survey, the primary reason given by youth in 1990 for working part time was school enrolment. Since then, however, the inability to find full-time work has jumped in terms of its frequency as an explanation, suggesting that slack labour market conditions are a major factor behind increasing part-time employment. Being able to only find part-time work – that is, "involuntary" part-time employment – has consistently been the second most frequently cited reason. There is a

cyclical element to involuntary part-time employment, as it tends to rise during recessions and fall during recoveries. However, the link between the business cycle and youth involuntary part-time employment appears to have become decoupled during the latest economic recovery, with its incidence among youth continuing to rise.

Turning to unemployment, Exhibit 1 shows that the youth unemployment rate has consistently paralleled the adult rate, though at a significantly higher level. The gap between the two rates is not constant, however, with the differential traditionally being greatest during recessions. The relative worsening of youth unemployment during recessions reflects the greater vulnerability young people face because of their lack of seniority. Collective agreements, formal employer policies, and informal norms typically use tenure as a factor in determining layoff decisions. During periods of downsizing, youth have a relatively high probability of being let go. During the expansion stage of the cycle, we would expect the youth unemployment rate to fall more sharply than that of adults, which is what happened during the recovery from the 1980s recession. However, there is no sign that the youth rate has fallen more quickly following the 1990-92 recession, as the gap remained at almost eight percentage points in 1995. Other data indicate that 15-19 year-olds consistently experience higher unemployment rates that 20-24 year-olds and that men experience slightly higher rates than women.

EXHIBIT 1
Unemployment Rates, Youth (15-24 Years)
and Adult (25+ Years) Groups, 1980-1995



Source: Calculations based on Labour Force Survey data (1996 revision), Statistics Canada.

TABLE 3
Average Duration of Unemployment Spells[1] by Age and Sex Groups, Selected Years, 1980-1995

	1980	1985	1990	1992	1995
15-24 year-olds	12.4	15.7	11.9	15.8	15.5
Males	12.2	16.1	12.4	16.9	16.0
Females	12.6	15.0	11.3	14.1	14.7
25-44 year-olds	15.9	23.2	17.5	24.0	25.7
45+ year-olds	18.9	29.7	22.8	28.4	31.9

Source: Calculations based on Labour Force Survey data (1996 revision), Statistics Canada.

Although the youth unemployment rate is higher than the overall average, youth tend to experience shorter spells of unemployment[6]. As shown in Table 3, the average duration of unemployment is lowest for youth and rises with age. Further, this differential grew over the 1980-1995 period. The duration of unemployment tends to increase for all age groups during recessions; however, unlike previous recoveries, the duration of unemployment has not decreased in the post-recessionary 1990s. Young men tend to have a slightly longer unemployment duration than young women and this differential is modestly greater now than it was in the 1980s. Because of shorter unemployment spells, the percentage of "discouraged " workers will be lower for youth than for adults.[7]

THE ROLE OF EDUCATIONAL ATTAINMENT

In this section, we use Labour Force Survey data to consider the relationship between educational attainment and trends in youth labour force participation, employment and unemployment.

6. The Labour Force Survey data on the duration of unemployment measures the length of *in-progress* spells at the time of the survey. With these cross-section data, we are unable to measure how long the unemployment spell actually was.

7. This concept relates to jobless individuals who stop searching for work because they believe there are no jobs available, taken as a percentage of those not in the labour force who looked for work in the last six months. Since they are no longer searching, these "discouraged" workers are not counted as being unemployed or in the labour force, which results in a downward bias in the measured rate of unemployment.

Education and Labour Force Participation

The youth labour force has become more highly educated over time. Table 4 shows that there are greater numbers of youth with post-secondary qualifications in the labour force today than was the case at the beginning of the 1980s. In 1980, 70 percent of the youth labour force had no schooling beyond the secondary level; by 1995, this share had dropped to almost one-half. On the other hand, the proportion with a post-secondary certificate or degree almost doubled over the period, increasing from 13.0 percent to 25.1 percent.

Youth labour-force participation rates rise with education (see Table 5); decreases in youth participation rates have been greatest for the least educated. An important point to note is that the participation rate of high school graduates is much higher than the rate for those with only some high school education. In fact, it is higher even than for those with some (incomplete) post-secondary education.

TABLE 4
The Education Composition of the Youth Labour Force: Proportions with Selected Levels of Education Attainment, Selected Years, 1980-1995

	Percentage of the Youth Labour Force With:	
	High School[1]	Post-Secondary Certificate or Degree
1980	70.3	13.0
1985	63.5	16.2
1990	57.4	21.4
1995	52.0	25.1

1. Note that prior to 1990 the Labour Force Survey included those with some high school together with graduates; from 1990 on, these two groups were separated. See text for other changes.
Source: Calculations based on Labour Force Survey data (1996 revisions), Statistics Canada.

TABLE 5
Youth Labour Force Participation Rates, by Educational Attainment Level, Selected Years, 1980-1995

	Primary School Education (0-8 Years)	Some or Completed High School (9-13 Years)[1]		Some Post-Secondary School	Post-Secondary Certificate or Diploma	University Degree
1980	48.5	67.8		66.5	82.1	81.3
1985	44.8	67.6		67.5	82.7	82.9
		Some	Completed			
1990	45.5	59.1	81.7	69.4	83.6	83.3
1995[2]	33.0	48.5	76.7	65.0	79.3	79.6

1. Note that prior to 1990 the Labour Force Survey included those with some high school together with graduates; from 1990 on, these two groups were separated. See text for other changes.
Source: Calculations based on Labour Force Survey data (1996 revision), Statistics Canada.

Education and Unemployment

Table 6 summarizes the 1980 to 1994 unemployment rate trends for youth, by different levels of educational attainment. There is a clear inverse relationship between educational attainment and unemployment. In 1994, for example, the unemployment rate of 15-24 year-olds with only primary schooling was 27.9 percent, which was almost triple the rate for those with a university degree (8.6 percent).

This relationship between educational attainment and unemployment has been consistent throughout the 1980-1994 period. However, some additional insights are gained by looking at the 1980s and the 1990s separately. During the second half of the 1980s, youth unemployment dropped as all educational groups benefited from the strengthening of the labour market. However, gains were not evenly distributed, as the *relative* youth unemployment rate increased substantially for those with primary school education only, but fell for those with a university degree.

TABLE 6
Youth Unemployment Rates,
Actual and Relative to Aggregate Youth Unemployment Rates,
by Educational Attainment Level, Selected Years, 1980-1994

	Primary School Education (0-8 Years)	Some or Completed High School[1] (9-13 Years)		Some Post-Secondary School	Post-Secondary Certificate or Diploma	University Degree
1980	22.2	14.0		9.3	8.7	7.0
1985	27.4	18.3		11.7	10.3	9.7
		Some	Completed			
1990	25.0	16.5	16.3	9.3	8.7	6.6
1992	27.8	24.2	16.6	13.5	12.2	10.5
1994	27.9	22.1	14.2	12.4	11.0	8.6
As a Percentage of Aggregate Youth Unemployment Rate						
1980	169.5	106.9		71.0	66.4	53.4
1985	168.1	112.2		71.8	63.2	59.5
		Some	Completed			
1990	196.9	129.9	94.5	73.2	68.5	52.0
1992	156.2	136.0	93.3	78.0	68.5	59.0
1994	178.9	138.8	95.8	79.5	70.5	55.1

1. Note that prior to 1989 the Labour Force Survey included those with some high school together with graduates; from 1990 on, these two groups were separated. See text for other changes.
Source: Calculations based on Labour Force Survey data (1996 revisions), Statistics Canada.

A different pattern has characterized the 1990s. In the recession years of 1990-92, each of the education groups experienced rising unemployment rates although, in relative terms, the increase was smallest for the primary-school educated. In the recovery phase, when one would expect declines, the unemployment rate for the least educated group stayed about the same, while that of the other education categories saw small decreases of one to two percentage points. Relative to the overall youth unemployment rate, however, the rate for the least educated rose by over 20 percentage points.

OLDER YOUTH AGE GROUP

The results presented are for the traditionally defined youth age group, 15-24 years of age. As we indicated, fractured school-to-work transitions are prolonging the period youth traditionally are in school and delaying their entry into full-time employment. In this section we consider the labour market outcomes for the 25-29 age group, that segment of the population most affected by this phenomenon. Many of the above labour markets indicators were run for this age group based on unpublished data that covered the period up to 1994. Among the findings were:

- The 25-29 age group represents about 10 percent of the total population and 13 percent of the total labour force. Since 1990, both shares have been falling.

- The labour force participation rate for this age group (83.8 percent) is higher than it is for other youth age groups, but has also been falling during the 1990s.

- The employment share of the 25-29 age group (12.6 percent) maintained a fairly constant level during the 1980s but has fallen in the 1990s. Its employment-to-population ratio, which is higher than the 15-24 year-olds' share, peaked around 1990 at 78 percent and has fallen off in the 1990s.

- The incidence of part-time employment among 25-29 year-olds (11.4 percent) is much lower than 15-24 year-olds, but has also been rising since 1980.

- Similarly, the unemployment rate of this age group (11.5 percent) is lower than other youth age groups but has risen during the 1990s.

- Youth 25-29 years old tend to have higher levels of educational attainment than youth 15-24 years old.

- The 25-29 age group tends to exhibit labour market patterns by education level similar to the 15-24 age group. For example, the unemployment rate for those with no more than a primary school education is almost four times the rate for university degree holders (27.0 versus 7.3 percent), and over twice the overall unemployment rate of 25-29 year-olds.

INDUSTRIAL PATTERNS OF EMPLOYMENT

In recent years concern about the youth labour market situation has often focused on the types of jobs young people are finding. In particular, there has been a great deal of concern about the spread of "McJobs," involving contingent, dead-end employment in the

TABLE 7
Representational Employment Indices for Two-Digit Industries, by Age Group, 1994[1]

Industry	Total Employment 15-24 Years (000s)	Index[2]			
		15-24 Years	15-19 Years	20-24 Years	25-29 Years
Personal services	386.6	2.42	3.39	1.85	1.00
Private household	59.6	2.40	5.06	0.83	0.79
Recreation	71.0	2.21	2.90	1.81	1.01
Retail trade	527.9	1.99	2.41	1.73	0.96
Miscellaneous	79.4	1.36	1.37	1.35	1.03
Agriculture	65.4	0.99	1.59	0.63	0.61
Wholesale trade	87.6	0.92	0.58	1.12	1.04
Construction	85.0	0.73	0.43	0.90	1.20
Non-durable manuf.	110.4	0.72	0.52	0.83	1.05
Business services	89.5	0.70	0.29	0.94	1.25
Doctors	23.9	0.64	0.34	0.82	0.90
Durable manuf.	95.2	0.64	0.35	0.81	1.04
FIRE	72.0	0.59	0.24	0.79	1.14
Hospitals	92.1	0.55	0.24	0.73	1.08
Transportation	38.2	0.47	0.25	0.60	0.85
Mining	11.2	0.46	n/a	0.73	0.93
Post office	9.4	0.45	n/a	0.72	1.22
Public administration	60.1	0.44	0.30	0.52	0.84
Education	64.0	0.43	0.23	0.54	0.81
Communication	11.9	0.43	n/a	0.68	1.16
Utilities	6.5	0.29	n/a	0.46	0.95

1. This table only includes industries with total employment of 100,000 in 1994.
2. Representational index is explained in the text.
Source: Computations based on Labour Force Survey data.

service sector. In this section, we examine this job quality issue by analyzing the industrial composition of youth employment over the 1976-1994 period.[8]

Table 7 summarizes this analysis by reporting the 1994 "representational indices" for the different youth age groupings (including the 25-29 age group) for 21 two-digit industries. These indices reveal how the employment profile of a given age group differs from the overall employment profile.[9]

6. For the results of a similar analysis by occupation, see Betcherman and Leckie (forthcoming).
9. For more detail on the methodology, see Betcherman and Leckie (1995).

As the table indicates, youth were over-represented (i.e., its share of employment in the industry was greater than its share of total employment) in 1994 in five industries. These are all "traditional" service industries, which are characterized by "bad jobs" – i.e., with relatively low wages, poor benefit coverage, and high incidences of contingent work (Economic Council of Canada, 1990). Two of these industries, personal services and retail trade, stand out, both for their high index values and because they were by far the largest absolute employers of youth in this age group. Youth were underrepresented in the "dynamic" service and "non-market" service sub-sectors, as well as in the goods sector. Note that these are the major sources of "good" jobs in the labour market.

The table shows that the general patterns describing the 15-24 year age group are most extreme for the youngest sub-group. The 15-19 year-olds have particularly high representation indices for the traditional services and very low indices for industries in the other sectors of the economy. As we move into the 20-24 year-old category, these patterns still exist but they are more moderate. Finally, when we consider the 25-29 year-olds, their employment pattern resembles the labour force as a whole, with representational indices converging on a value of one.

Are the patterns of youth industrial employment in 1994 different from those observed in earlier years? To address this question, we compared the latest 15-24 year-old indices with those for 1976. While we have not included the results here, they indicate that the concentration of employment in the traditional services existed in the 1970s but the degree of overrepresentation was not nearly as strong as it is now. In other words, young workers two decades ago were more likely to be employed in industries like personal services and retail trade than anywhere else but this trend has intensified significantly over the past two decades.

Clearly, the industrial pattern of youth employment reflects a number of factors. One determinant is the structure of economic growth. Where growth has been strong, employment opportunities, by definition, are relatively abundant and in these situations, we tend to find that young workers are able to get access to jobs. Job value is also important. Youth are over-represented in low-wage, secondary labour markets, in part because of a lack of experience and completed education. We do find that the concentration in "bad job" sectors does weaken as we move from the 15-19 year-old grouping into the 20-24 and, especially, the 25-29 year-old categories.

One finding that deserves close attention, though, is the increased concentration of youth in the "bad-job" industries. This observation – coupled with the increased incidence of non-standard work documented earlier and the relative decline in youth earnings which we will report on later – does raise concerns about the overall quality of youth employment in the 1990s.

HUMAN CAPITAL FORMATION

We begin this section by looking at trends in education enrolment among the youth population. Following this, we turn to the participation of young people in adult education and training.

Education Enrolment

Table 8 reports full-time enrolment rates in post-secondary institutions only[10]. It indicates that enrolment has increased for all age groups in each of the types of post-secondary education during the 1980s and early 1990s. In community colleges, the increase in enrolment has been large for those 16-17 years of age (7.4 percent in 1985-86 to 9.4 percent in 1993-94). Increases in undergraduate university enrolment rates have also been significant both for the 18-21 and 22-24 year-olds.

TABLE 8
Youth Full-Time Enrolment as Per Cent of Each Age Group Population, Selected Years, 1981-1994

	1981/82	1985/86	1988/89	1989/90	1993/94
COMMUNITY COLLEGE					
17 year-olds	—	7.4	8.1	8.3	9.4
18-21 year-olds	—	11.6	11.9	11.8	13.5
22-24 year-olds	—	2.8	2.8	2.9	4.2
25-29 year-olds	—	0.9	0.9	0.9	1.4
UNDERGRADUATE UNIVERSITY					
18-21 year-olds	11.3	13.4	15.3	15.7	17.2
22-24 year-olds	6.3	7.6	8.0	8.3	10.8
25-29 year-olds	1.5	1.7	1.7	1.7	2.0
GRADUATE SCHOOL					
22-24 year-olds	0.8	0.8	0.8	0.8	1.1
25-29 year-olds	0.9	1.0	0.9	0.9	1.1

Source: Statistics Canada, *Education in Canada*, 1987-1988, 1990-1991 and 1995, Catalogue 81-229.

10. Since these data only cover post-secondary enrolment, enrolment rates, particularly for the younger age groups where secondary enrolment is still pertinent, will be lower than those derived from the LFS data.

Adult Education and Training

The analysis in this subsection is based on the Adult Education and Training Survey (AETS) which collects data on education and training activities outside regular full-time schooling.[11] Table 9 considers 1993 participation rates in adult education and training (AET) by age and by type of AET. This table reports that participation in all adult education and training (AET) varies by age, rising with age until 30-34 year group and dropping off slightly for the 35-54 age group and then rapidly for the older groups. Other results (not shown) indicate that this pattern characterizes both men and women, with a slightly higher incidence among women in most age categories.

TABLE 9
Participation Rates in Adult Education and Training (AET), by Type and by Age Group, 1993, 1994 Adult Education and Training Survey

Age (Years)	Percentage of the Total Population Participating in Any AET	Job-Related Adult Education and Training		Percentage of the *Employed* Population[1] Participating in Employer-Sponsored, Job-Related AET
		Percentage Participating	Percentage that is Employer-Sponsored	
17-19	28.9	14.5	37.9	7.0
20-24	32.9	21.5	43.7	13.2
25-29	33.4	26.1	64.0	22.2
30-34	37.2	28.0	75.7	27.4
35-54	34.7	26.6	78.2	26.7
55-64	15.7	8.2	81.7	14.8
65+	6.3	--	--	--
Total	**28.0**	**19.7**	**71.1**	**22.8**

1. As of January 1994.
Source: Unpublished AETS 1994 data obtained from Statistics Canada.

The overall age pattern characterizing training is particularly strong for job-related

11. This subsection excludes activities associated with enrolment in regular full-time programs offered by educational institutions, including enrolment of those returning to school after a prolonged absence (returning adult learners). The training activities included here are restricted to short-term or part-time courses, trade and apprenticeship programs, and employer-sponsored full-time programs taken by individuals aged 17 and over in 1993.

training, especially when it is employer-sponsored.[12] While there is relatively little difference in the incidence of all AET across age groups until age 55 (ranging between 28.9 and 37.2 percent), the differential is almost double (14.5 percent to 28.0 per cent) for job-related training and fourfold (7.0 per cent to 27.4 percent) for employer-sponsored, job-related training between the 17-19 age group and the 30-34 age group. Note the low

TABLE 10
Youth Participation Rates in Adult Education and Training, by Type, Educational Attainment Level, and Age Group, 1993
1994 Adult Education and Training Survey

Education Attainment Level	17-19 Years Old			20-24 Years Old			25-29 Years Old		
	Any AET	Job-Related AET	Job-Related, Employer-Sponsored AET[1]	Any AET	Job-Related AET	Job-Related, Employer-Sponsored AET[1]	Any AET	Job-Related AET	Job-Related, Employer-Sponsored AET[1]
0-8 years	--	--	--	--	--	--	--	--	--
Some high school	29.8	15.2	--	23.1	14.9	--	16.2	12.3	--
Graduated high school	26.4	14.1	--	28.7	19.9	12.0	23.6	18.3	14.0
Some post-secondary	31.9	13.6	--	39.2	25.3	13.0	38.1	30.4	18.3
PSE cert. or diploma	--	--	--	34.6	22.6	17.2	39.6	30.2	25.1
University degree	--	--	--	48.8	29.8	--	46.9	39.0	34.5
Total	**28.9**	**14.5**	**7.0**	**32.9**	**21.5**	**13.2**	**33.4**	**26.1**	**22.2**

-- Results are too small to be reported.
1. Based on the population of individuals who were employed at time of the survey (January 1994).
Source: Unpublished AETS 1994 data obtained from Statistics Canada.

percentage of job-related training for the youth age categories that is employer-sponsored, likely reflecting the concentration of youth employment in non-standard jobs and in jobs in

12. Note that individuals may have engaged in both job-related and non-job-related activities; as a result, the differences between the first two columns of the table cannot be used to measure participation rates for non-job-related activities. The participation rates for employer-sponsored, job-related AET are based on the employed population (as the denominator) to control for the effect of different age-group employment rates. As a result, the numerator and denominator are based on different populations. The denominator includes the population of individuals employed at the time of the survey (January 1994) while the numerator is based on those who received employer-sponsored job-related training in 1993 which includes those who were no longer employed at the time of the survey.

the secondary labour market.

Compared to the 1991 experience, there has been little difference in the overall level of training activity in 1993, but there have been changes in the extent of participation by age. Among youth, there has been a decline in participation rates both for all AET and for job-related training.

Table 10 considers AET participation among youth (including the 25-29 year group) in different types of AET by education attainment level. These data support the frequently observed link between educational attainment and participation in further training, specifically for the 20-24 and 25-29 year-old categories.[13] For example, almost one-half of the university degree holders between 25 and 29 years of age reported some AET during 1993, compared to only one in six who had not completed high school. Similar magnitudes of difference applied to job-related training, both overall and employer-sponsored.

These results underscore the disadvantage for less educated youth in terms of accumulating human capital to improve future prospects.

EARNINGS OF YOUNG WORKERS

In this section, we review the available studies on the earnings profiles of young workers. Our focus is on how differentials between young workers and the rest of the labour force have changed over time? Most studies we have examined draw on data from Statistics Canada's Survey of Consumer Finances (SCF). The latest year for which SCF data are available is 1993.

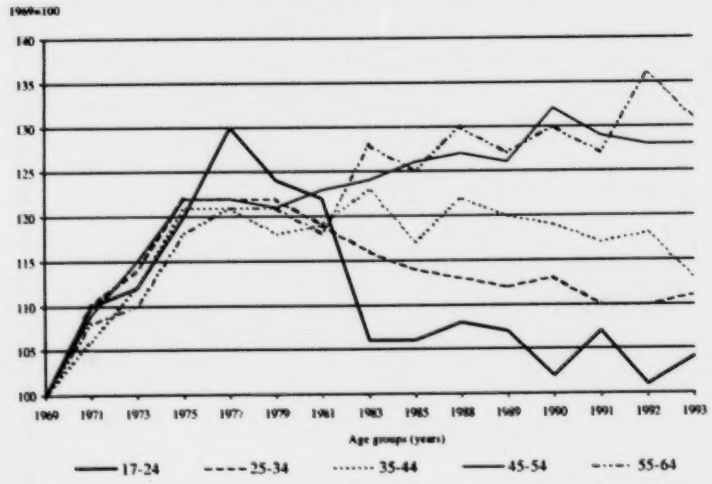
Young people, of course, tend to earn less than their older counterparts. What is especially relevant is how this differential has changed over time. Exhibits 2 and 3 present, for males and females respectively, indices of mean annual earnings by age group from 1969 to 1993 (in 1986 dollars) for full-year, full-time earners. By limiting our analysis to this group, we eliminate the potential role of shorter working time for young workers.

These exhibits indicate that the gap in annual earnings between youth and the other age groups has widened over this period. This is especially marked for males (Exhibit 2).

---

13. The AETS data cannot be used to test the relationship between educational attainment and training for the 17-19 year-olds because of small cells for the higher education categories. The large number of empty cells in Table 6-4 both for the 17-19 year olds and for the 0-8 years education level row is due both to the low numbers of individuals in these categories and to their low level of participation in AET activities.

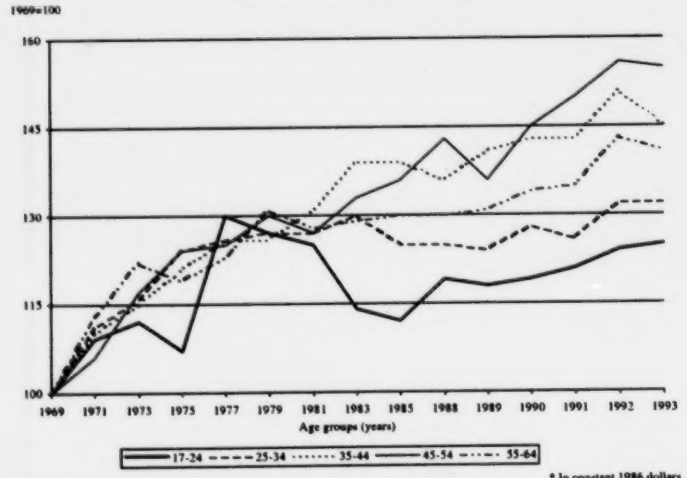
EXHIBIT 2
Index of Real* Mean Annual Earnings by Age Group, Men, 1969-1993 Full-Year Full-Time Workers



Source: Based on data from the Survey of Consumer Finances, obtained from Business and Labour Markets Analysis Division, Statistics Canada

* In constant 1986 dollars

EXHIBIT 3
Index of Real* Mean Annual Earnings by Age Group, Women, 1969-1993 Full-Year Full-Time Workers



Source: Based on data from the Survey of Consumer Finances, obtained from Business and Labour Markets Analysis Division, Statistics Canada

* In constant 1986 dollars

For example, older (55-64 years of age) males working full-time, full-year saw their real earnings rise by 31 percent between 1969 and 1993 while young men (15-24 years of age) realized only a 4 percent real gain. Note the overall pattern of earnings rising with age. The pattern for females is similar although less striking. First, female earnings have increased more in real terms over the period and this is reflected in higher rates of increase for young women. However, gains have been greatest in older age groups here as well.

These rising age earnings differentials have also been observed for mean *hourly* earnings over the 1981-1990 period (Morissette, 1995) and for median total family income by age of head over the 1972-1991 period (Beach and Slotsve, 1996). Note that similar patterns have been observed in other countries (Davis, 1992).

Examining trends over the entire 1969-1993 period, however, masks distinct sub-period patterns. During the 1970s, youth had the greatest wage gains. Between 1979 and 1983, covering the early 1980s recession, most of these relative gains were wiped out. Since 1983, the gap between youth and the other groups continued to widen, particularly for males during the 1990s.

Riddell (1995) sums up these patterns by concluding that the changes observed are the product of both increasing returns to experience (a structural change) and the recessions (a cyclical change, evidenced by the sharp declines in youth wages during the two most recent downturns).

CONCLUSION

In this paper, we have summarized the evidence on a number of key trends in the youth labour market. In part, these trends reflect demographic developments, specifically the decreasing youth population share over the past 15 years. They also reflect the broader changes in the economy that have affected the employment picture for all groups in the labour force.

There are three points emerging from our analysis that merit emphasis in this conclusion:

- First, the recovery of the 1990s seems to have largely bypassed youth. Most notable, perhaps, has been the continued decline in participation rates. Also, unemployment, employment, and earnings have not rebounded as one might have expected given the patterns of earlier business cycles.

- Second, there are real concerns about the long-term job quality trends for youth. Evidence underlying this concern includes the increasing concentration of employed youth in non-standard jobs and in the secondary labour market industries, and the relative decline in youth wages. In some ways, the restructuring of the labour market is occurring in ways that are excluding many young people.

- Third, education (and human capital more broadly) is increasingly important as the "sorter" of labour market experiences. The evidence of deteriorating employment outcomes is particularly strong in the case of poorly educated youth.

In our view, these trends justify policy-makers in placing special attention on youth employment. Certainly, all groups are experiencing difficulties in the economy of

the 1990s but young people seem to be enduring more than their share of the hardship. Furthermore, while any group experiencing labour market problems represents a policy concern, that becomes even more compelling when youth is the group in question. And, while today's young people may be well situated to establish a more secure foothold in the labour market as the baby-boom generation starts to retire, that outflow will not become significant until early in the next century. This raises concerns about "scarring" for the current youth generation.

REFERENCES

Beach, Charles M., and George A. Slotsve. 1996. *Are We Becoming Two Societies: Income Polarization and the Myth of the Declining Middle Class,* The Social Policy Challenge 12. Toronto: C.D. Howe Institute.

Betcherman, Gordon. 1995. "Inside the Black Box: Human Resource Management and the Labour Market." In *Good Jobs, Bad Jobs, No Jobs,* by Roy J. Adams, Gordon Betcherman, and Beth Bilson. Toronto: C.D. Howe Institute.

Betcherman, Gordon, and Norm Leckie. 1995. *The Age Structure of Employment in Industries and Occupations: An Analysis of the 1991 Canadian Census Data.* Paper prepared for the Canadian Aging Research Network, University of Toronto. Unpublished.

Betcherman, Gordon, and Norm Leckie. Forthcoming. "Youth Employment and Education Trends." Canadian Policy Research Networks Working Paper. Ottawa.

Davis, S.J. 1992. "Cross-Country Patterns and Change in Relative Wages." National Bureau of Economic Research Working Paper No. 4085. Cambridge, MA.

Economic Council of Canada. 1990. *Good Jobs, Bad Jobs.* Ottawa: Supply and Services Canada.

Krahn, Harvey, and Graham Lowe. 1990. *Young Workers in the Service Economy.* Economic Council of Canada Working Paper No. 14. Ottawa.

Morissette, René. 1995. *Why has Inequality in Weekly Earnings increased in Canada?* Analytical Studies Branch, Research Series Paper No. 80. Ottawa: Statistics Canada.

Riddell, Craig W. 1995. "Human Capital Formation in Canada: Recent Developments and Policy Responses." In *Labour Market Polarization and Social Policy Reform,* edited by Keith G. Banting and Charles M. Beach. Kingston, Ont.: Queen's University, School of Policy Studies.

Sunter, Deborah. 1994. "Youths – waiting it out." *Perspectives,* Statistics Canada, Catalogue No. 75-001E (Spring): 31-36.

Chapter 3

Evidence on the Effectiveness of Youth Labour Market Programs in Canada: An Assessment

W. Craig Riddell*
University of British Columbia

This paper summarizes the available evidence on the effectiveness of various labour market programs directed at Canadian youth. Some of these programs are directed specifically at youths while others have youths among their target population. Evidence is available on federal government programs carried out over the past three decades which have been the subject of a formal program evaluation. Provincial programs (some of which may have been evaluated) are not included in this summary and assessment.

The objective of this report is to provide some information related to the following issues: what programs work, what programs don't work, for what groups or types of individuals the programs are effective or ineffective, and under what conditions particular programs achieve or fail to achieve their objectives. Thus the paper involves both summarizing the findings of various program evaluations and assessing the credibility of the evidence put forward in these evaluation studies.

A large number of interventions have been employed in an attempt to help youths encountering difficulties in the labour market. Nonetheless, it is worth noting that there are a variety of policies which might be effective in helping youths and young adults but which are not examined in this study because they are not formal "programs" and have thus not been evaluated. For example, there is considerable evidence indicating that early childhood development (especially that in the first three years of life) is very important in the development of physiological, intellectual and social abilities later in life (see, for example, Hertzman, 1994). Thus investing in parenting skills and other ways of enhancing early childhood development may have a high payoff to society in terms of preventing or reducing future problems. Similarly, improvements in the quality of elementary and secondary schooling, especially those that are relatively inexpensive, could also have a high social return. For example, more homework that is marked and returned to the student has been found to be highly effective relative to its cost in a recent U.S. study (Betts, 1996). The effectiveness of such preventative strategies has not been subject to formal program evaluations such as those examined here, although there is a growing body of social science literature from which some estimates of their benefits and costs could be formed. The task of this project is the more limited, but nonetheless

* ***I am grateful to Alan Stark for valuable research assistance and to Shirley Fullarton, John Greenwood, Paul Kingwell, Harvey Krahn, Lars Osberg, Saul Schwartz and Marc Van Audenrode for comments on an earlier version of this report.***

important, one of analyzing what lessons may be learned from the variety of interventions that have been implemented and evaluated.

Most of these interventions are the labour market counterparts of what has been called the "repair shop model" in the health context. That is, the programs generally try to deal with individuals encountering problems in the labour market or in the transition from school to work after these problems have become apparent rather than trying to prevent the problems from occurring in the first place. However, some of the interventions examined here, particularly those for youths still in school, are more preventative than "repair shop" in nature.

EVALUATING SOCIAL PROGRAMS

As input into future policy formation, this study is concerned more with the lessons learned from program evaluations than it is concerned with evaluation methodology. Nonetheless, any attempt to draw lessons from such studies necessarily involves an assessment of the credibility of the evidence. Without such an assessment there is no way of knowing which findings should be discounted and which should receive considerable weight. As a consequence, some brief observations on evaluation methodology will provide useful background to what follows.

At the outset, it is important to recognize the significance of evaluation research. Society needs to know which programs achieve their objectives, which do not, and how well various programs meet their goals. All programs use scarce resources. In addition, there will always exist alternative policies that could be used to achieve the same objectives. Optimal use of society's scarce resources requires employing those policies that are most effective in meeting the objectives and that do so at the lowest social cost. The importance of examining the effectiveness of government policies, while always present, is particularly evident in periods such as the present when government budgets are subject to considerable scrutiny.

It is also important to recognize that evaluation research is challenging. The essence of the challenge is easy to describe. The objective is to determine the impacts of the program on outcomes of interest; for example, in training programs we often wish to know the impacts of training on employment and earnings. For program participants we can observe these outcomes after the completion of the program. However, we do not indeed, cannot observe what would have occurred to participants in the absence of the program. Evaluating program effects thus necessarily involves a *counterfactual assessment* determining what the participants would have experienced if they had not received the intervention. Because the counterfactual is inherently unobservable, it must be estimated. Two broad approaches to estimating what would have taken place in the absence of the intervention have been employed social experiments and non-experimental analyses.

Experimental versus Non-Experimental Approaches

In social experiments, individuals who qualify for the program are randomly assigned to treatment (experimental) and control groups. The important advantage of random assignment is that it provides a straightforward and unbiased estimate of the counterfactual. Because qualified applicants are randomly assigned to the two groups, those in the treatment group should be the same, on average, as those in the control group. Thus the behavior of the control group provides an unbiased estimate of what would have been observed for the treatment group in the absence of the intervention. In particular, as discussed below, random assignment obviates the need to take account of selection bias.

In non-experimental (also referred to as quasi-experimental) evaluation studies, a "comparison group" of individuals who did not participate in the program is often used to provide a counterfactual estimate. However, in the absence of random assignment there is no assurance that the participants and comparison group exhibit the same behavior on average; and, therefore, no assurance that the behavior of the comparison group provides an unbiased estimate of what would have been observed for the participants in the absence of the intervention. Many evaluation studies use a "matched comparison group" methodology in which the comparison group is chosen such that its average characteristics are the same as those of the participants on such observable dimensions as age, gender and education. However, in the absence of random assignment, there is no assurance that the treatment and comparison groups are similar, on average, in their unobservable characteristics. In particular, because they have applied for and have been selected by program administrators to enroll in the program, participants are likely to differ in terms of unobservable characteristics from otherwise similar individuals who did not apply for or become selected for the intervention. When these unobservable characteristics that influence selection into the program are correlated with program outcomes, the behavior of the comparison group does not provide an unbiased estimate of what would have been observed for the participants in the absence of the program. This is the problem of selection bias; it is a pervasive phenomenon and is potentially a concern in any non-experimental evaluation. The methods used to address the potential problem of selection bias are a central consideration in assessing the credibility of the evidence on program effects.

The advantages and disadvantages of both experimental and non-experimental approaches have been extensively discussed in the academic and policy evaluation literature.[14] Because all of the studies examined in this project employ non-experimental techniques, this debate is not discussed further here. However, an important dimension of this debate the degree to which the conclusions of non-experimental evaluation studies are dependent on choices made by the researchers is central to this report and is therefore discussed further below.

Advances in Evaluation Methodology

---

[14] See Burtless, 1995, and Heckman and Smith, 1995, for excellent recent statements of the cases for random assignment and non-experimental methods respectively.

Although attempts to examine the effectiveness of government programs have a long history, formal systematic evaluation of such programs is a relatively recent phenomenon. For example, the Canadian federal government has been systematically evaluating programs since the late 1970s and provincial evaluation efforts are generally even more recent and less systematic.[15]

Over the same period there have been significant advances in evaluation methodology. Particularly important was the development by James Heckman and others of statistical techniques for dealing with selection bias. Although these methods are now part of the standard tool kit of non-experimental evaluation, they were first put forward less than two decades ago.

As background for the subsequent discussion of individual evaluation reports it is useful to briefly sketch the evolution of evaluation methodology over the past two decades. Four principal phases can be distinguished:

1. pre- versus post-program comparisons of participants;
2. comparisons of participants and comparison group without accounting for selection;
3. comparisons of participants and comparison group taking account of selection; and
4. collection of additional data on selection into the program and carrying out specification tests of alternative estimators.

Each of these phases is evident in the evaluation studies examined in this report, which is not surprising given that the studies span the period over which this evolution in "best practice" took place.

Simple pre- versus post-treatment comparisons have the obvious disadvantage that they assume the counterfactual is well estimated by the average behavior of the participants prior to the intervention. However, labour market outcomes such as employment and earnings are highly dependent on general economic conditions which may have changed between the pre-treatment and post-treatment periods. Furthermore, many individuals enter training or other employment programs because they are currently encountering difficulties in the labour market. Thus their earnings or employment may be temporarily depressed and therefore not a good estimate of their normal levels. For these reasons, a generally preferred method is to use a comparison group, the members of which are likely to be affected in a similar fashion to participants by changes in general economic conditions or other forces affecting the outcomes of interest.

Simple comparison group designs compare the behavior of the treatment and comparison groups following the intervention, sometimes controlling (usually via regression analysis) for differences in the characteristics of the two groups. Thus the

---

[15] See Riddell, 1991, for a review of evaluation practice in North America.

behavior of the comparison group in the post-intervention period is used as the estimate of the counterfactual. This deals with the above problem of changes in economic or other conditions between the pre- and post-treatment periods. However, this method does not account for selection into the program and therefore may be subject to selection bias.

The next phase consists of studies which model the outcomes of interest for both participants and the comparison group and also model selection into the program, that is the fact that participants have applied for the intervention and have been chosen by program administrators and the fact that this is not the case for non-participants. Often this approach is carried out in two stages, the first involving the modeling of selection into the program, from which a "selection bias correction" term is constructed, and the second modeling the outcome(s) of interest, including in the estimation the selection bias correction term, which (under appropriate assumptions) yields unbiased estimates of program impacts. A common assumption is that the unobserved factors affecting both participation in the program and the outcomes of the program are normally distributed, in which case the first stage selection equation is estimated as a probit. This two-stage procedure can be implemented with post-program data alone or with both pre- and post-program data. When pre-program information is incorporated, this is usually introduced as a lagged dependent variable in the second-stage outcomes equation.

The main alternative to this two-stage estimation procedure is to assume that the unobserved factors affecting the outcomes of interest (and possibly also selection into the program) are constant over time, though they may differ across individuals. This assumption of person-specific fixed effects leads to the use of a longitudinal estimator, and thus requires both pre-program and post-program information on participants and non-participants. The most commonly used longitudinal estimator is the "difference-in-differences" estimator which can be thought of as taking the average difference between the treatment and the comparison group in the post-treatment period minus the average difference between the two groups in the pre-treatment period. This estimator thus nets out factors which are constant over time for each individual but which differ across individuals. This estimator provides unbiased estimates of program impacts when such unobserved factors also influence selection into the program. More complex assumptions about the nature of person-specific effects can be made, and associated with these assumptions are alternative longitudinal estimators.

Whether only post-program or both pre- and post-program data are available and whether one employs a two-stage Heckman-type procedure or a longitudinal estimator, it is important to recognize that there are typically a variety of possible ways to model the factors determining selection into the program. Each estimator provides an unbiased estimate of the impact of the program if the assumptions underlying the estimator are correct. However, because these approaches make different assumptions they cannot all be correct. Indeed, because they make different assumptions, only one of which can be correct, it follows that at most only one approach will yield an unbiased estimate of program impact. The problem facing the evaluator is that of determining which set of assumptions is correct. In general this is difficult to do on the basis of *a priori* reasoning alone, especially because modeling selection involves assumptions about the roles of both

observable and unobservable factors. For these reasons, the use of specification tests (the final phase noted above) comes in. By utilizing a battery of specification tests, it may be possible to reject some assumptions (and thus their associated estimators) as being inconsistent with the data, and to not reject others. If so, the range of estimates of program impact may have been narrowed.

This issue of the variety of possible estimates of program impact is central to best practice in non-experimental evaluation. Indeed, it is not inaccurate to describe this issue as the "Achilles heel" of non-experimental methods. There is considerable evidence, especially from the evaluation of training programs, that non-experimental estimates of program impact are quite sensitive to a large number of decisions that need to be made by the researcher (see LaLonde, 1995, and the references cited there). These include the choice of the comparison group and how selection into the program is modeled. In the absence of a series of specification tests such as those described by Heckman and Hotz (1989) and Moffitt (1991), it is very difficult to determine whether the researchers made good choices in these respects.

There is also considerable potential value in collecting detailed information on the processes by which participants are selected into the program (i.e. information on the choices made by both participants and program administrators). Accounting for selection bias requires that both selection into the program and the outcomes of the program on participants be jointly modeled. A well known problem in such jointly determined systems relates to "identification." Essentially "identification" refers to the ability (or inability) to separate the factors affecting selection into the program from those which influence the outcomes of the program. In order to achieve identification, it is generally necessary to observe some variables which influence selection into or participation in the program but which do not influence the outcomes of the program. Because many of the control variables which are typically observed such as age, gender, educational attainment, employment history may influence both participation in the program and the impact of the program on labour market outcomes, it is frequently difficult to obtain such identifying variables. Making a special effort to collect such information (for example, from surveys of participants, non-participants and program administrators) can thus improve the modeling of program participation and thus reduce the extent to which the estimated program impacts may be affected by selection bias.

As a general rule, the approaches taken in the evaluation reports reviewed here followed the above description of the evolution of "best practice." Since advances in evaluation methodology were taking place throughout the last two decades, it is obviously inappropriate to criticize studies for using methods that may have been accepted practice at the time but which are now regarded as inappropriate. However, it is also the case that we may not be able to place much confidence in studies that used poor methods even if these methods were regarded as "best practice" at the time. As a consequence, we are more likely as a general rule to put more weight on the more recent studies.

LESSONS FROM THE EVALUATION OF YOUTH PROGRAMS

The remainder of the report discusses the findings from the evaluations of youth programs. This material is presented in two ways. The main body of the report summarizes the principal lessons which follow from the evidence contained in the evaluation studies. To make these summaries as comparable as possible, each evaluation report is presented in a common format under the following headings:

- Program rationale;
- Target group;
- Nature of intervention;
- Time period covered by program;
- Time period covered by evaluation;
- Evaluation methodology;
- Principal findings; and
- Commentary on findings.

The programs are discussed below under a number of categories according to the nature of the intervention. However, the distinctions are not always clear cut, both because some interventions are not easily categorized and because programs often contain a variety of interventions. When a program has two or more components with different interventions, each component is discussed under the relevant intervention. The discussion of the lessons learned about the efficacy of particular interventions proceeds in a chronological fashion.

Training

Programs for out-of-school youth typically attempt to enhance the skills of these individuals to improve their employability and/or provide employment opportunities that might not otherwise exist. Training programs provide a good example of the former objective and job creation programs (discussed subsequently) of the latter. Some programs such as wage subsidies which also provide financial assistance to employers to offset the costs of training attempt to achieve both these outcomes.

Training programs have been extensively evaluated. The design and emphasis of these programs have changed over time, in part as a consequence of the conclusions of program evaluations. Thus our experience with the various forms these programs have taken offers the potential to learn about the effectiveness of various forms of training. As noted previously there have also been distinct phases evident in the evaluation methodology used to assess training programs.

The following programs include training (classroom training and/or on-the-job training) and are discussed below (the date shown is the year in which the evaluation report was completed):

National Institutional Training Program (1985);
Youth Training Option (1987);
Job Entry Program (1989);
Job Development Program (1989);
Skill Shortages Program (1991);
Severely Employment Disadvantaged Option of the Job Entry Program (1993);
Longitudinal Study of Training Impacts for the Job Entry and Job Development Programs (1993);
Employability Initiatives for Social Assistance Recipients (1994);
Employability Improvement Program (1995).

Some of these programs focus on youth while others are general training programs which have youths among their target population. In addition, the Youth Internship Program (#28, 1995), which provides a combination of on-the-job and off-the-job training, is also discussed in this section.

The National Institutional Training Program (NITP) provided classroom training in entry-level occupational skills (the Skill Training option) and in basic mathematics, science and communications skills (the Basic Training for Skills Development option). The evaluation concluded that the Skills Training option had no impact on the earnings or employability of participants and the BTSD option actually had a negative impact on these labour market outcomes (i.e., the comparison group, who did not receive institutional training in basic skills, achieved higher earnings and employment than the participants). The view that such classroom training is relatively ineffective seems to have become part of "accepted wisdom" as judged by comments in subsequent evaluation reports in part on the basis of this evaluation study. However, the evidence on which this conclusion is based is rather flimsy. The sample sizes for the comparison groups used to estimate the training impacts of both the Skills Training and BTSD options are extremely small, and there was no attempt to account for selection bias. (Selection bias can result in the true program impacts being either under-estimated or over-estimated.)

The NITP was a general training program and the results are not presented separately for youths and adults. Thus it is not clear from the evaluation study whether the general findings would apply if youths were examined separately. However, inspection of the data presented in the report does reveal that the pre- versus post-training change in earnings was especially large (and positive) for younger participants in the program. Unfortunately, the pre- versus post-training data for the comparison group are not reported, so it is not possible to determine whether this was also true for the comparison group.

In summary, the view that classroom training is not very effective in terms of achieving subsequent labour market success may be correct, but this evaluation study does not provide convincing evidence that this is the case. For youths, in particular, the

raw data indicate substantial gains in earnings and employment relative to pre-training levels; however, it is not known whether such gains were also achieved by comparable youths who did not receive institutional training.

The Youth Training Option (YTO) was a pilot program which provided structured practical and theoretical training to help school leavers entering the labour market. The evaluation study was carried out under "time and budget" restrictions. The absence of a matched comparison group is probably the most important limitation of the study; however, YTO participants were compared to a comparison group of NITP participants thus giving some information on relative impacts of the YTO approach (combined on-the-job and formal training) and the NITP classroom training approach. Other limitations are the short-term nature of the measured impacts (average of nine months of post-training experience) and the fact that many participants had only recently completed their training. Nonetheless, the evidence of substantial gains in earnings and employment relative to the pre-training period is encouraging. Furthermore, the finding that these gains were larger than those in the matched NITP comparison group provides suggestive but by no means conclusive evidence that this combination of formal and on-the-job training is beneficial, at least in the very short run, to school leavers making the transition to work.

The introduction in 1985 of the Canadian Jobs Strategy (CJS) brought a shift in emphasis in training and related programs away from classroom training toward combining training and work experience. Other features emphasized in the CJS were increased involvement of private sector participants, encouraging more competition in the provision of training, and greater targeting of programs on those most in need. Each of the CJS programs has been evaluated, and the evaluation studies discussed below relate to programs which have youths as their target population or have a significant number of youths as participants.

With the introduction of the Canadian Jobs Strategy, the YTO was incorporated into the Job Entry Program, one component of which (the Entry Option) provided combined training and work experience for unemployed youth in an attempt to aid the transition from school to work. The Job Entry evaluation report studied three program options: Entry, Re-entry (focused on women re-entering the labour market) and the Direct Purchase Option (DPO) which provided institutional training to unemployed youth and women re-entering the labour market. The evaluation was more carefully executed than either the NITP or YTO studies discussed above. The combination of positive gains in earnings and employment for most participants in the Entry and Re-entry options and mixed results for the DPO option provides somewhat more conclusive evidence that the combination of training and work experience is beneficial to youths in making the transition from school to work and is preferable to classroom training alone. Nonetheless, although this is the strongest evidence on training impacts discussed so far, it is important to keep some limitations in mind. First, the findings relate to the impacts during the first twenty-two months following training. This is clearly an improvement over the nine-month follow-up used in the YTO evaluation, but nonetheless leaves open the question of whether training has similar (or any) long-term effects. Second, the study was carried out

at a time (late 1980s) when the economy was growing rapidly and the overall prospects for youth employment were relatively favourable.

Although Job Entry was the CJS program most clearly focused on youth, two other CJS programs Job Development and Skills Shortages also had significant numbers of young participants. The Job Development program was directed toward the long-term unemployed, and the interventions included training and work experience, plus counseling in the Severely Employment Disadvantaged (SED) option. The evaluation indicated that the impacts of these interventions were mixed, with some of the three options which were evaluated having positive impacts for some groups but not for others. Separate estimated impacts on employment are presented for youths and these indicate that the program reduced employment of young females but substantially increased employment of young males. Unfortunately the study did not provide useful estimates of the impact on earnings, the most comprehensive measure of labour market success (since it incorporates any effects on both employment and wages). The qualifications noted above with respect to the Job Entry study also apply to the Job Development evaluation.

The Skill Shortages Program was directed at providing training in occupations which were in (or projected to be in) short supply. Youths typically comprised 25 to 40 percent of the participants in each of the three program options which were evaluated. Estimated impacts of each option on earnings and employment were positive and very large. Unfortunately for the purposes of this report, separate results are not presented for young participants.

A further evaluation of the Severely Employment Disadvantaged (SED) option (which was transferred from the Job Development program to the Job Entry program in 1987) was subsequently carried out. Given the difficulties faced by these individuals in the labour market, the results were encouraging. Gains in both employment and earnings were attributed to the program.

Most of the evaluation studies discussed above follow participants for 18 to 24 months after training. Although this time period may be long enough for the effects of training to become well-established, it is nonetheless an important unresolved question whether these effects dissipate or, perhaps, grow larger as the return on the initial investment accumulates over longer periods. A valuable attempt to address this issue was made by the Longitudinal Study of Training Impacts for the Job Entry and Job Development Programs completed in 1993. This study re-surveyed respondents who were originally surveyed as part of the evaluations of the Job Entry and Job Development programs (both participant and comparison group members), thus providing information on impacts three to four years after training. The study also takes advantage of the longitudinal nature of the data and appears to be carefully executed. In general, the study finds that short-run gains from training typically dissipate over time. Nonetheless, in some cases (i.e. for some options of the two programs, or for some groups) there are both short-run and long-run benefits associated with training and work experience, albeit the long-run impacts are generally much smaller than those which occur in the first year or two after the program.

This is the finding (positive short-run impacts, much smaller but nonetheless positive impacts in the long run) for the Entry option of Job Entry, the option most relevant for youths. In the case of the Severely Employment Disadvantaged, there appear to be no long-run benefits from the intervention. Interestingly, classroom training (the Direct Purchase Option of Job Entry) is found to produce only a short-run impact on employment but has a long-run impact on earnings (as well as a smaller long-run impact on employment). This result suggests that the earnings benefits of classroom training may take longer to accrue than those associated with on-the-job training/work experience.

Further evidence on the impacts of training under CJS programs comes from the Evaluation of Employability Initiatives for Social Assistance Recipients in CJS completed in 1993. Rapid growth in the number of social assistance recipients (SARs) classified as "employable" led to initiatives to provide training and related "employability" measures to these individuals. Three CJS components were evaluated: Job Entry, Job Development and Direct Purchase Option (DPO). The methodology employed in this evaluation is similar to that used in the previous CJS evaluations discussed above. Results indicate moderately-large positive impacts on participants in Job Entry and Job Development, and more modest impacts for institutional training (DPO). Although youths are not examined separately, the largest estimated impacts are for the Job Entry program which has youths as one of its two target groups, and the estimated impact equations show stronger results for younger participants.

The most recently evaluated training program is the Employability Improvement Program which replaced services and programs offered under the CJS and the National Employment Services in 1991. Two of the three program options analysed involve training; Project-based Training (PBT) combines training and work experience and Purchase of Training (POT) provides classroom training. The third option (Job Opportunities) involves wage subsidies and is discussed in a subsequent section. In general, the evaluation study finds large positive impacts associated with both the PBT and POT options. The methodology appears to be similar to that used in CJS evaluations, but the evaluation report is less detailed than earlier studies and is thus difficult to assess for the purposes of this report.

Two features of the Employability Improvement Program (EIP) evaluation are noteworthy. First, the estimated program impacts are very large despite the generally weak economic conditions facing program completers during the early 1990s. (Of course, comparison group members also faced similar conditions.) Second, in contrast to the evaluations of training programs reviewed above, youths benefited less from EIP than did adults. Nonetheless, there were positive impacts from two of the three program components (Job Opportunities and POT) for youths. The conclusion that in the 1990s youths benefited less from training and related programs than adults contrasts with the findings of comparable evaluations during the 1980s, and may well be related to the deterioration of labour market opportunities for youths relative to those for adults which has characterized the 1990s.

The final program examined in this section is the Youth Internship Program, which is designed to aid the school-to-work transition for youths not going on to post-secondary education by fostering linkages between school and work and by providing internship experiences which combine on-the-job and off-the-job training. At this time, only the process evaluation of this initiative has been completed; thus there is not yet any information on program impacts.

Several conclusions appear to follow from this chronological review of training program evaluations. First, the estimated impacts of these programs on earnings and employability of participants are often positive. There is little in the available evidence to suggest that training "doesn't work" at least in the short run (one to two years following program completion). Second, the estimated impacts of training show a distinct tendency to increase over the past two decades. This greater estimated return to government-sponsored training could be due to several factors: improvements in program design and delivery, improvements in evaluation and measurement methods (although such improvements could result in either lower or higher estimated impacts of training), and increases in the underlying return to skills and knowledge. Although all three could play a role, the latter factor is also consistent with other evidence which indicates that the return to human capital formation increased during the 1980s and 1990s, the time period covered by these evaluation studies. Third, training programs generally benefit youths. Indeed, during the 1980s the estimated program impacts were typically larger for youths than for adults although the reverse seems to be true in the 1990s. The fact that youth employment conditions improved relative to adults in the expansionary period following the 1981-82 recession but have worsened relative to adults during the 1990s is a plausible explanation for these differences in estimated program impacts.

Several other conclusions appear warranted from these studies. The generally positive impacts of training on earnings and employability appear to be mainly short term in nature; nonetheless, positive (but typically much smaller) effects persist over longer periods for some trainees. Unfortunately the (limited) available evidence suggests that those facing the greatest labour market difficulties are those who are least likely to obtain benefits which persist beyond a year or two of the training. A related conclusion is that estimated training impacts are generally largest for those facing the best labour market opportunities and smallest for those, such as the "Severely Employment Disadvantaged" who face the greatest obstacles to obtaining and retaining employment. Nonetheless, even for this group, training programs are generally beneficial at least in the short run.

Analysis of the type of training that is most likely to be effective, under what conditions different types of training are beneficial, and related issues such as how best to design and administer such programs requires a more detailed examination of evaluation studies than has been possible here. However, the above review does suggest that classroom training can be beneficial for youths, both in the short term and longer term. Furthermore, there is also some evidence which suggests that classroom training combined with work experience is more beneficial than classroom training alone.

Wage subsidy programs

These programs involve a wage subsidy paid to the employer in an attempt to encourage employment (and thus the accumulation of work experience) that might not otherwise occur; financial assistance with training costs may also be provided. Although there are fewer evaluations of wage subsidy programs, this policy approach has been used throughout the last two decades and the available evidence is generally positive.

Each of the wage subsidy programs discussed below were previously referred to in the discussion of training programs: Skill Shortages Program (#29, 1991) and Employability Improvement Program (#1, 1995). In addition, wage subsidies have often been used in job creation and summer employment programs, which are discussed below.

The Critical Trade Skills Training Program (CTSTP) under the National Training Act of 1982 provided a wage subsidy to employers who provided industrial training, and the evaluation of this program (not included among the programs deemed particularly relevant to youths) concluded that such subsidized training resulted in higher earnings and productivity of participants.

Subsequent evaluations generally support the view that wage subsidies can be effective in raising the productivity and earnings of participating employees. Under its Workplace-Based Training option (WBT), the Skill Shortages Program (SSP) provided a wage subsidy to employers providing training and the evaluation concluded that there were large positive impacts on the employment, earnings and wages of participants. Both the CTSTP and SSP were intended to provide training in skills identified as being (or projected to be) in short supply relative to demand, and thus were not targeted on individuals experiencing labour market difficulties.

The Job Opportunities (JO) option of the Employability Improvement Program (EIP) continues this policy of providing to participating employers a wage subsidy and financial assistance to offset training costs. The recent EIP evaluation also estimates large positive impacts on employment and earnings of participants.

Most of these evaluation reports do not present results separately for youths and adults, so it is not possible to assess whether youths are likely to benefit more or less than the participating population as a whole from the subsidy. However, given the average age of participants in these programs (for example, 34 in the case of JO participants in EIP) youths are likely to be a significant fraction of the participants.

An issue that often arises in assessing wage subsidy programs is the extent to which the subsidized employment and/or training would have occurred in the absence of the subsidy. Although this is a relevant question, it is also extremely difficult to answer. Attempts to address this question (as was done in the Skill Shortages evaluation) usually rely on asking employers what they would have done in the absence of the subsidy. It is not clear that much weight should be placed on their responses.

An interesting question is whether wage subsidies might be a useful approach in times such as the 1990s characterized by overall weak employment conditions, while training may be more relevant in more buoyant conditions. Although this view seems plausible, the evaluation evidence does not provide much guidance. However, the JO option does appear to have been effective for youths during the 1990s, which provides some support for this position.

Co-operative Education Programs

Co-op programs provide another method of combining formal education and work experience. Co-op programs have been employed by a number of educational institutions and tend to be concentrated in particular fields (such as university engineering programs). Grants to encourage co-op programs have been available under the Job Entry program since the introduction of the CJS in 1985, and were continued under the Employability Improvement Program. This section discusses the evaluation of the Co-operative Education Option under Job Entry together with the evidence provided in a recent study of university co-op programs (Darch, 1995).

The Job Entry Co-operative Education Option provided grants to both secondary school boards and post-secondary educational institutions. Because these two groups of participants are very different they are treated separately in the evaluation. In both cases a comparison group of otherwise similar students not participating in a co-op program was employed.

For the many advocates of co-op programs, the evaluation results for secondary students are disappointing. Students participating in co-op programs were less likely to go on to post-secondary education; and, among those who did proceed to post-secondary education, co-op participants were less likely to continue. However, it is unclear whether this finding should be attributed to the impact of the program or to the type of students who choose to participate in co-op education. That is, co-op programs may appeal more to students who are less likely to continue their education beyond high school. It is unclear from the evaluation report whether (and, if so, how) this type of selection bias was addressed in the estimation of program impacts.

Among those individuals not proceeding to post-secondary education, co-op programs did not appear to have any significant impacts on labour market indicators such as time to find their first job, percent of time spent employed, and earnings. In addition, school leaving rates of co-op and non-co-op students were not significantly different. These findings suggest that co-op programs may not have any impact on labour market success, at least in the short run, or on school completion rates. However, another possible explanation for these results is that co-op programs do, in fact, raise the likelihood of school completion and/or improve employment and earnings but that these programs attract students whose school completion or employment and earnings would be below average in the absence of the program. It is unclear from the evaluation report whether (and, if so, how) such selection effects were taken into account in estimating the impacts of the program.

In summary, the conclusions of the evaluation study are not positive with regard to the impacts of co-op programs at the secondary school level. However, selection bias is likely to be an important factor in this situation, and in the absence of information about whether and how selection into the co-op programs was dealt with, little weight should be given to this evidence.

The evaluation of the impacts of the post-secondary co-op programs was much more positive with respect to the potential benefits of this form of education. Co-op education was associated with a large positive impact on earnings, a small positive impact on the percent of time employed, and no impact on the time taken to find the first job after graduation. However, co-op programs tend to be heavily concentrated in fields of study which are also associated with above-average earnings (engineering, computer science, commerce and economics). The evaluation report does not present the regression results used in the estimation of program impacts; thus it is not possible to determine how the field of study was taken into account. In the absence of this information one should be cautious in concluding that co-op programs are effective in raising earnings and employment of post-secondary graduates.

Additional information on the impacts of co-operative education is provided by a recent study which uses the 1992 Survey of 1990 Graduates (Darch, 1995). This analysis is confined to three fields of study which account for more than 80 percent of co-op graduates: engineering, mathematics and physical sciences (including computer science), and commerce and economics. A separate analysis of participants and non-participants is carried out for each of these three fields of study. However, the study does not attempt to control for selection into co-op programs. If, for example, co-op programs attract better students, then we would expect the graduates of such programs to do better in the labour market even in the absence of any direct effect of the program on earnings or employment. Thus further analysis of these data, with appropriate modeling of the selection into these programs, seems worthwhile.

The study found that co-op programs had a modest impact on employment and earnings in two fields (mathematics and science and commerce and economics) but no impact in engineering. No significant difference between co-op and non-co-op graduates was found in the match between field of study and the job; this match was high in all three fields.

In summary, the available evidence suggests that co-op programs do not have positive effects on school leaving rates or labour market success at the secondary level, but that such programs do have beneficial impacts on labour market outcomes for post-secondary graduates. However, further analysis of the possible impacts of co-operative education appears warranted. Specifically, the apparent absence of positive impacts at the secondary level and the evidence suggesting positive effects at the post-secondary level could be due to the types of students who participate in co-op programs rather than to any impacts of the program on behavior. In addition, because the existing studies focus on

the impacts two years or less after graduation, there would be considerable value in examining whether such programs have long run impacts.

Job Creation Programs

Job creation programs fall into two main categories: those intending to provide year-round employment, which are targeted on unemployed youth who have completed or left school; and summer employment programs, which are targeted on those intending to return to school (and, in some cases, recent graduates who have not yet obtained more permanent employment). These two types are discussed in turn.

Job creation programs also differ in another important dimension. One approach involves providing a wage subsidy to participating employers (often organizations in both the public and private sectors) to encourage them to hire youths that they might not otherwise employ. The second approach is to establish an organization which selects participating youths, chooses tasks to be undertaken (perhaps in consultation with community organizations) and assigns participants to tasks. The latter are sometimes referred to as "make-work" projects.

The principal objective of job creation programs is typically to reduce unemployment among the target population. In addition, these programs often seek to provide employment that will enhance the skills and career development of participating youths and that will provide work that will benefit the community.

The counterfactual relating to job creation programs can be discussed at two levels of generality. The first, most general, level addresses the question of whether these programs actually "create jobs." If the program is permanent in nature (i.e. either a summer employment program or a year-round employment program which continues year after year) then the count of jobs "created" has to be balanced against an estimate of how many jobs are destroyed by the payment of taxes used to finance the program.[16] If the program is not permanent but rather is intended to operate in a counter-cyclical fashion, building up a surplus in "good times" and running a deficit in recessions, then the financing of the program is still an issue to be addressed but estimating the counterfactual would also involve assessing the ups and downs that would occur in the absence of the program.

The program evaluations do not attempt to estimate the counterfactual at this level of generality. This observation is important to keep in mind because evaluations of these programs generally contain counts of the number of "jobs created;" indeed, often these studies contain estimates of "net job creation." In these circumstances, net job creation

---

[16] For an example of an attempt to measure both gross and net job creation of industrial subsidies see Leonard and Van Audenrode (1993). The issue of the cost of financing is, of course, relevant to all government programs. The reason for placing particular emphasis on the financing issue in the discussion of job creation programs is because an assessment of the impacts of such programs is almost meaningless without taking account of the impacts of financing on job creation or destruction.

does not refer to the difference between gross job creation and an estimate of gross job destruction associated with the financing of the program.

The counterfactual that is assessed in these evaluation studies is as follows: ignoring the implications of the financing of the program, what would the unemployment rate of participating youths have been in the absence of the program. In programs involving wage subsidies to participating employers, the amount of employment that would have occurred in the absence of the subsidy is also often estimated.

Two additional general observations should be made before examining the experience with job creation programs. First, even if it were the case that such programs do not in fact result in net job creation (because the jobs destroyed by the financing of the program offset the jobs created), the program may still be judged to be desireable because the program may alter the regions or communities in which the jobs exist or the types of individuals (in this case, unemployed youths) receiving these jobs. That is, these programs may have as much to do with "redistributing jobs" as with "creating jobs." Second, in addition to these "job counting" issues, the nature of the job may enhance skills, aid career development or benefit the community in ways that the jobs destroyed may not have done.

Job Creation Programs for Out-of-School Youth

The available evidence about the effects of year-round job creation or public employment programs is not extensive. The 1979-80 Youth Job Corps program (#4, 1981) had both summer and year-round components. However, the estimates of the counterfactual both the degree of employment of youths in the absence of the program and the extent to which participating employers would have hired workers in the absence of the program are very crude and based on assumptions, the validity of which are difficult to assess. A key limitation is the absence of a comparison group methodology in this and other studies of job creation programs.

More recently, two process evaluations of youth job creation programs have been carried out: Strategic Initiatives Student Work and Services Program (1995) and Youth Services Canada. Although these evaluations may be very useful for a variety of purposes, being process evaluations they do not attempt to determine the impacts of the program on labour market outcomes, and they do thus not contribute to the objectives of this report.

Summer Employment Programs

In contrast to the situation with year-round job creation initiatives, there is an extensive body of experience from the evaluations of summer employment programs. Programs reviewed here include:

- Young Canada Works 1977 (1978);

- Summer Youth Employment Program 1978 (1979);
- Summer Youth Employment Program 1980 (1982);
- Private Sector Internship Program, Summer Canada 1983 (1983);
- Summer Employment/Experience Development Program, Challenge 1985 (1986);
- Summer Employment/Experience Development Program, Challenge 1986 (1987);
- Student Business Loans, Challenge 1986 (1987).

As a general rule, these evaluation studies are much less informative than the evaluations of training programs regarding the impacts of these summer employment programs on participants. The principal limitation is that discussed above in the context of the Youth Job Corps the lack of a comparison group of non-participants. In the absence of a comparison group, the evaluation studies estimate the youth unemployment rate that would have prevailed without the program and the amount of employment that participating employers would have created without the program by a combination of relatively crude assumptions and responses of participants to surveys in which they are asked about their behavior in the absence of the program. Typically, the studies conclude that the program had a fairly substantial effect on youth unemployment and that much, but not all, of the employment created by the wage subsidy would not have occurred in the absence of the program.

However, this evidence is not very convincing. Thus it is difficult to say from the available evidence what impacts these program have and how they may stack up against alternative policies. This does not imply that the programs have not been effective in achieving their objectives. They may indeed have been effective, but the available evidence does not allow one to confidently state that this is the case, nor does it allow one to compare the effectiveness of this approach to alternatives.

The evaluations of job creation programs both year-round and summer employment focus on the impact of the program during the period in which the program is in operation. However, as noted previously, one objective of these programs is often to provide work experience that will enhance the skills or aid career development of participants. To determine whether these programs achieve this objective, it would be necessary to carry out some follow-up analysis, i.e. examine how participants (and, if possible, a comparison group of non-participants) behave in the post-intervention period. Such follow-up surveys have not been carried out in the studies reviewed here; thus the long term impacts of these job creation policies are unknown at present.

Comprehensive Youth Services

As noted previously, the various programs targeted on youths are not easily classified, in part because individual programs often contain a number of interventions. What are referred to here as "comprehensive youth services" (CYS) programs are designed to offer a wide range of services, generally tailored to the needs of individual participants. These programs are typically targeted on disadvantaged youths and those facing the greatest obstacles to labour market participation. The Severely Employment

Disadvantaged option of the Job Development/ Job Entry programs (#23, 1993; discussed previously in the context of training) is an example of this approach. This program provided counseling and assessment services in addition to training. As discussed previously, this program had positive impacts on employment and earnings of participants in the short run, but no impact on longer-term labour market outcomes.

The evaluation of the Outreach program (#20, 1989) is discussed only briefly, in part because the program was not focused on youth and in part because the evaluation study does not provide clear evidence of program impacts. This program provided a variety of services to the disadvantaged and was designed to help those who are not served adequately by the standard (CEC) delivery of services. Pre-program versus post-program comparison indicates positive impacts on self-reliance and employment. However, because of the difficulty of contacting a representative sample of participants in the twelve-month follow-up survey and because of the apparent absence of allowance for selection into the program, these findings should be regarded as suggestive but not conclusive evidence of beneficial effects of the program.

Additional information on the potential for such services to help disadvantaged youths and those facing significant obstacles to school completion and labour market success comes from the recent evaluations of the Canada/New Brunswick Youth Strategy (#22, 1994) and Canada/Newfoundland Youth Strategy (#26, 1994). Both programs offered a range of federal and provincial programs and services including assessment and counseling, education and literacy upgrading, training and work experience, transition-to-work skills, and career information. These programs and services were particularly targeted on disadvantaged youths, including students at risk of dropping out, school drop-outs, substance abusers seeking help, UI and social assistance recipients, single parents, young offenders, Natives, the seasonally-employed, and disabled and visible minorities. Given the nature of the target population and the generally weak labour market conditions in these two provinces, it would be realistic (based on findings of experimental evaluations of programs designed to help disadvantaged youths, such as those carried out by the Manpower Demonstration and Research Corporation in the United States) to not expect a large positive impact of these programs.

Both evaluations were carefully executed, and included attempts to gather and use information on the nature of the selection process into the program and to carry out specification tests. Thus these evaluations correspond to the most recent phase in the evolution of evaluation methodology discussed previously. Nonetheless, it should be recognized that there are special challenges associated with non-experimental evaluations of the "comprehensive youths services" programs. The special nature of the target population disadvantaged youths makes it difficult to obtain a well-matched comparison group from the usual sources (in this case, the UI administrative file). In addition, the heterogeneous nature of both the participants and the intervention(s) makes it difficult to determine which services are useful to which types of program clients. The variety of services provided also makes it difficult to attribute any estimated impacts to specific services. Furthermore, in the two evaluation studies being examined here, the sample sizes (2,200 and 1,200 participants in N.B. and Newfoundland respectively, and 1,100

and 600 non-participants respectively) are not large enough to analyze various subsets of the population.

The results from these two evaluations suggest that such packages of programs and services can be beneficial in some dimensions but that the impacts, when positive, are not large. The largest effect of the programs are on the total amount of time spent in either school or work; this increased by approximately 10 percent in both provinces. Most of this increase corresponds to more time spent in school as (relative to the comparison group of non-participants) time spent working changed little as a result of the program. The programs also tended to increase years of schooling among participants in both provinces, with the positive effect being largest for the least educated; generally there was not a positive impact on schooling among the more highly-educated participants. The findings relating to reliance on public assistance were not consistent across the two jurisdictions, with the program tending to increase use of welfare (but not UI) in New Brunswick and to decrease use of UI (but not affect use of welfare) in Newfoundland. Similarly inconsistent results were obtained for the impact on earnings, with participants exhibiting increased post-program earnings in Newfoundland but no change in earnings in New Brunswick. However, the amount of data available on earnings was quite limited so not too much emphasis should be placed on this feature of the results.

In summary, these two evaluation studies provide some limited support for the view that packages of programs and services tailored to individual needs can benefit disadvantaged youths, even in relatively weak labour markets. However, the impacts of these programs appear to be modest. Furthermore, the measured program effects are short-term in nature (generally one to two years after the intervention) and it is important to know whether such services and programs have any lasting impacts. The combined facts that (i) any positive program impacts are likely to be relatively modest, though still perhaps large enough to make the program socially worthwhile; and (ii) these programs are very difficult to evaluate with standard non-experimental methods because of the heterogeneous nature of both the participants and the services provided suggest that such programs would be good candidates for social experiments.

Stay-in-School Programs

Several programs discussed previously such as Co-operative Education and the Canada/Newfoundland and Canada/New Brunswick Youth Strategies had among their objectives that of encouraging young people to remain in school. Each of these programs appears to have achieved some success in this regard, although the evidence is generally inconclusive, in part because of the difficulty of obtaining a comparison group of students who are similarly at risk of dropping out of school.

The recent National Stay-in-School Initiative (#7, 1995) had as its principal focus the objective of reducing the school drop-out rate. The nature of the intervention (public awareness, mobilization of stakeholders) makes this a very difficult program to evaluate

with standard methodology; for example, it is not clear which students are participants and which are non-participants. Thus the study does not attempt to estimate the impact of the program. Nonetheless, surveys of students and in-school and out-of-school coordinators elicited generally positive responses about this initiative. The fact that the program was introduced during a period when high school drop-outs faced extremely weak labour market prospects may also have encouraged students to remain in school. Thus it is possible that the coordinators are attributing to the program effects that have other causes.

CONCLUSIONS

This report has assessed and reviewed the evidence available from formal program evaluations of federal labour market interventions directed at youths, or which had youths among their target population. Three general observations are made in this concluding section. First, it is important to acknowledge the significance of having a large body of evidence on program impacts from these evaluation studies, and to point out ways that body of evidence could be improved upon in future. Second, some of the limitations of the present assessment and review of this evidence should be noted. Third, it is worthwhile briefly summarizing the main conclusions reached in this review.

Significance and evolution of evaluation research

As is especially evident in the case of evaluations of training programs, the quality of the evidence on program effectiveness has improved significantly over this time period. Recent evaluations generally have large samples of participants and non-participants, reasonably well-matched treatment and comparison groups, some pre-program information and more detailed post-program information, and adopt some statistical methods to account for non-random selection into the program. In terms of the phases of evolution in non-experimental evaluation methodology described earlier, the main weakness of the recent evaluation studies is the general lack of specification tests. As expected, earlier evaluation studies have more identifiable weaknesses because best practice has advanced over the period.

Although the quality of the evidence has improved, it is important to point out that those who are skeptical about what can be learned with confidence from non-experimental or quasi-experimental methods would probably not be convinced by these studies. Such skeptics would point out that different teams of well-trained researchers using these methods would probably produce a variety of estimates of program impact, depending on their choices relating to the composition of the comparison group and the way selection into the program is modeled. As discussed previously, there is considerable evidence which supports this skeptic's view. The problem referred to earlier as the Achilles heel of non-experimental methods arises because there are a variety of choices that need to be made and there is not a straightforward way of determining, at least on *a priori* grounds, which choice is correct. Two responses to this dilemma are possible. One is to give up on non-experimental methods and only use experimental (random assignment) designs. Although there would be, in my opinion, significant long term

benefits from much greater emphasis on the use of social experiments in Canada, as a practical matter non-experimental methods are likely to remain the primary method of program evaluation at the present time. Furthermore, not all programs are suitable candidates for random assignment designs. The second response involves two complementary steps: (i) collecting detailed information on the factors determining participation in the program so that selection into the program can be modeled well and the separate effects of participation in the program and the impacts of the intervention can be identified; and (ii) employing a number of plausible specifications i.e., alternative choices of comparison group and/or assumptions about the form which selection into the program takes and to then use a battery of specification tests in the hope that some of these plausible specifications will be rejected by the data. This approach recognizes the uncertainty that exists about which of several possible specifications is correct. This approach may also not yield a single set of estimates of program impact that is, there may be more than one specification that cannot be rejected by the data. Nonetheless, adopting this approach would result in more convincing evidence of program effects than is available at present. In terms of current evaluation practice, this direction appears to warrant increased attention.

Some limitations of the assessment and review

As noted in the introduction, this report is confined to policies which have been introduced as federal government "programs" and which have been subject to a formal program evaluation. Although this constitutes a wide range of interventions, it clearly omits the evidence that may exist from various provincial initiatives as well as consideration of a broad range of policies such as those affecting early childhood development and the quality of schooling.

Even within the purview of this report, a number of aspects warrant attention (or further attention) in a more detailed assessment of the evidence. Perhaps clearest is the need to have a greater understanding of why particular interventions are effective and others appear ineffective. To what extent is the effectiveness of a program related to factors such as the labour market conditions at the time or in the region, the way the program is administered, and the many design decision made in the process of program implementation? Although some observations about the possible role of such factors as labour market conditions were made in this review, a more detailed examination of these and other factors would be worthwhile. In addition to a limited amount of time series evidence associated with changes over time in youth layour market conditions, there is a potentially useful source of information on regional differences in program take-up and effectiveness in some of the evaluation studies.

Two additional limitations should be noted. First, the evaluation studies, focused as they are on particular programs, tell us relatively little about how various government policies interact with each other and how these interactions may affect program impacts. For example, the effectiveness of labour market training may depend not only on the design and implementation of the training program but on features of such other programs as unemployment insurance, workers' compensation and social assistance. Conclusions

about the effectiveness of particular interventions may thus be conditional on the specific array of policies in place at the time the intervention is introduced. A second, and potentially related issue, involves what is sometimes referred to as the displacement effect of labour market interventions. To what extent do any benefits to program participants come at the expense of adverse impacts on others, for example because trainees obtain employment that would otherwise be obtained by non-participants? In these circumstances, the net benefits of the program to society are smaller than the gross benefits received by program participants.

Summary of Findings

Training programs have been extensively investigated. The estimated impacts of these programs on the earnings and employability of participants are often positive. These generally positive impacts appear to be mainly short term (one to two years following training) in nature; nonetheless, positive (but typically much smaller) effects persist over longer periods for some trainees.

Estimated training impacts are generally largest for those facing the best labour market opportunities and smallest for those who face the greatest obstacles to obtaining and retaining employment. In addition, the limited available evidence suggests that those facing the greatest labour market difficulties are those who are likely to obtain benefits which persist beyond a year or two of the training.

The estimated impacts of government-sponsored training display a tendency to rise over the past several decades. This increase in the estimated return to training could be due to better program design and delivery, improvements in measuring the impacts of training, or increases in the underlying return to skills and knowledge.

The evaluation studies indicate that training generally benefits youths. Indeed, during the 1980s, estimated program impacts were typically larger for youths than adults, although the reverse seems to be true for the 1990s. The fact that youth employment conditions improved relative to adults following the 1981-82 recession but worsened relative to adults in the 1990s is a plausible explanation for these differences in estimated program impacts.

Wage subsidy programs (which have generally taken the form of subsidies to employers in an attempt to encourage employment and work experience that might not otherwise occur) have usually been found to improve the earnings and productivity of participants. Attempts to determine the extent to which subsidized employment and training would have occurred in the absence of the subsidy have not yielded convincing evidence.

Studies of the impacts of co-op programs conclude that such programs do not have positive impacts on school leaving rates or labour market success at the secondary level, but that co-op programs do have beneficial impacts for post-secondary graduates. However, the apparent absence of impacts at the secondary level and the

evidence suggesting positive effects at the post-secondary level could be due to the types of students who enroll in co-op programs (i.e. selection effects) rather than to any impacts of the program on behavior. Thus little weight should be given to the reported conclusions of these studies; further analysis of the impacts of co-op education appears warranted.

The evidence on the impacts of year-round job creation programs is too limited to form the basis for an assessment of the potential usefulness of such programs for out-of-school youths.

Although a large number of evaluations of summer employment programs have been carried out, the evidence provided by these studies is not very convincing. Thus it is difficult to determine from the available evidence what impacts these programs may have and how these stack up against alternative policies.

Studies of comprehensive youth services provide some limited support for the view that packages of programs and services tailored to individual needs can benefit disadvantaged youths, even in relatively weak labour markets. The combined facts that (i) any such benefits are likely to be relatively modest (though still perhaps large enough to make the program socially worthwhile) and (ii) these programs are very difficult to evaluate with non-experimental methods because of the heterogeneous nature of both the participants and the services provided suggest that such programs would be good candidates for social experiments.

Evidence on the impacts of stay-in-school programs in inconclusive.

REFERENCES

Betts, Julian R. 1995. "The Role of Homework in Improving School Quality." University of California at San Diego. Mimeographed.

Burtless, Gary. 1995. "The Case for Randomized Field Trials in Economic and Policy Research." *Journal of Economic Perspectives* 9 (Spring): 63-84.

Darch, Jamie. 1995. "Labour Market Outcomes for University Co-op Graduates." *Perspectives on Labour and Income* 7 (Autumn): 20-24.

Heckman, James J. and V. Joseph Hotz. 1989. "Choosing Among Alternative Nonexperimental Methods for Estimating the Impact of Social Programs: The Case of Manpower Training." *Journal of the American Statistical Association* 84: 862-74.

Heckman, James J. and Jeffrey A. Smith. 1995. "Assessing the Case for Social Experiments." *Journal of Economic Perspectives* 9 (Spring): 85-110.

Hertzman, Clyde. 1994. "The Lifelong Impact of Childhood Experiences: A Population Health Perspective." *Daedalus* 123 (Fall): 167-80.

LaLonde, Robert J. 1995. "The Promise of Public Sector-Sponsored Training Programs." *Journal of Economic Perspectives* 9 (Spring): 149-168.

Moffitt, Robert. 1991. "Program Evaluation with Nonexperimental Data." *Evaluation Review* 15 (June): 291-314.

Riddell, W. Craig. "Evaluation of Manpower and Training Programs: The North American Experience" in Evaluating Labour Market and Social Programs. Paris: OECD, 1991.

Chapter 4

What Works? Evidence from Evaluation Research on Programs for Disadvantaged Youths in the United States

David A. Long
Manpower Demonstration Research Corporation

INTRODUCTION

The well-documented link between students' educational achievement and their subsequent labour market success has become stronger over time. It is heartening, therefore, that the high school dropout rates in both Canada and the United States have declined over the last two decades. The rate is still high, however, especially for low-income and minority students. More than one in four low-income students in both countries do not complete high school and, among low-income students, the dropout rates for Hispanic and African American students in the US are especially high. The employment prospects for these dropouts is bleaker than ever. Moreover, the youths from low-income families who do earn a high diploma or its equivalent are often ill-prepared for employment, and struggle during their transition from school to work.[17]

Many social interventions have been developed to improve the economic outlook for disadvantaged youths. Which ones have been found to be effective, and why have they succeeded when others have failed? A large body of research in the United States has assessed these initiatives during the last 25 years. This paper offers a synthesis of what has been learned from the research on employment, training, and education programs in the US for disadvantaged young people in their teens and early twenties. These programs have used a variety of methods in addressing the economic and social problems facing youths from disadvantaged backgrounds. This synthesis summarizes research findings about the effectiveness of the programs, and draws lessons about the program *approaches* that appear to be most effective in working with specific groups of youths. The review focuses on findings about the programs' effects on youths' behaviour – in terms of employment, earnings, school completion, welfare receipt, crime, and other outcomes – rather than

[17]The sources of these data are Levy and Murnane, 1992; National Center for Education Statistics, 1992; U.S. Department of Labor, Employment and Training Administration, 1993; and D. Ross et al., 1994.

findings on the programs' implementation or costs, although these topics are also covered to some extent.

Most of the studies covered by this review have used an experimental research design, which is usually the most reliable way to measure the impacts of programs such as the ones discussed in this paper.[18] In experimental studies, eligible youths are randomly assigned either to a program group that is given access to the program being tested, or to a control group that cannot receive the program's services (in most studies the control group has remained eligible for all assistance and services provided by other programs). When the assignment process is random and the sample is large enough, the characteristics of the program and control groups are virtually the same, including both measurable attributes such as prior education and unmeasurable traits such as motivation. As a result, differences in performance between the two groups can confidently be attributed to the program that is evaluated.[19]

In quasi-experimental studies, youths targeted by a program are compared to a similar, but not randomly determined, group of youths. It is impossible to identify a comparison group that provides as good a benchmark against which to measure program impacts as a true control group. Even when a comparison group closely resembles a program group's observable characteristics, it may differ in unobservable features, such as the youths' motivation, making the results of quasi-experimental studies less reliable than those of experimental studies. However, the results of several well-designed studies, involving carefully matched comparison groups, are included in the synthesis.

An "impact" is the difference in an outcome, such as employment, between the program group and the control (or comparison) group.[20] It is important to recognize that, in assessing the performance of these two groups, researchers are *not* comparing youths who were exposed to the complete program to youths who experienced none of it. On the one hand, the program group usually consists of youths who *enrolled* in a program and, in many cases, these young people did not actually participate in it or participated for only a short time. On the other hand, members of the control group have often received education, training, and employment services on their own from programs other the one that was being

---

[18]See Ashenfelter, 1987. Indeed, a committee created by the National Academy of Sciences in the U.S. to review what is known about the effectiveness of youth employment programs concluded that little could be learned from most non-experimental evaluation research on programs for youths; see Committee on Youth Employment Programs, Commission on Behavioral and Social Sciences, 1985.

[19]Measured differences between a program and control group are considered conclusive if the differences are statistically significant. Evaluators have less confidence that insignificant differences are due to the program rather than chance. In order to find a significant difference a program must have impact on its participants, and the evaluation's sample must be large enough to detect the impact.

[20]The program-control comparison does not capture the indirect impacts of a program on youths and adults not served by the program. For example, successful program completers may have displaced other persons by taking jobs or attending college.

evaluated. Indeed, in some evaluations the frequency with which services were received by youths in evaluated programs has not substantially exceeded that of the control groups. In other words, the evaluations discussed below typically have compared the performance of one specific program to the performance of a mix of other programs available to youths in the communities where the evaluated program operated.

The next section of the paper culls several policy lessons from the entire body of completed and current evaluation research on US programs for disadvantaged youths. Then, with these themes in mind, the next two sections summarize the findings of individual studies, first for programs serving youths who were still enrolled in school when they started the programs, and then for programs targeted to youths who were not in school. The paper's last section presents its conclusions.

KEY CHARACTERISTICS OF SUCCESSFUL PROGRAMS

Decision makers are counseled to build on past successes and avoid repeating past mistakes. This advice is surely sound when, as is the case for programs working with disadvantaged youths, decision makers have access to a large body of respected research on pertinent programs that are currently running or have been operated in the past. The available research evidence in the United States indicates that a number of different programs have been effective for in-school youths, while fewer programs have been successful for dropouts. While identifying program successes is helpful, determining *why* some programs have worked and others have not is even more helpful.

It is always difficult to pinpoint the reasons why some programs have been more successful than others, but several program features stand out as consistently present in successful youth programs. Effective programs, regardless of whether they served youths who were in or out of school, appear to have some or all of the following four characteristics:

Sustained Adult Contact

Virtually all effective programs have involved sustained contact between adults, playing both monitoring and supporting roles, and the youths served by the programs. Researchers have long speculated that supportive relationships are an important ingredient of effective programs for youths.[21] The evidence to be assessed in this paper also suggests that adult contact should be maintained over an extended period and that monitoring of youths' actions, in addition to support, is a key element in contact that is effective.

The specific positions held by the adults – teacher, mentor, case manager, counselor, or supervisor – have varied across programs, and there are successful programs in which

[21] See, for example, Grossman and Halpern-Felsher, 1993.

contact was maintained by staff or volunteers in each of these positions. However, across these various roles, the "message" these adults have given the youths has often been something like the following:

- I am monitoring how you are doing – keeping track of the time you spend in prescribed activities, as well as your successes and failures in the activities.

- I will give you feedback – praising your efforts, acknowledging your struggles, and being firm in requiring you to do what the program expects. I will give you a hard time if you don't make an effort.

- I am here to help you do well – listening to your questions and problems, offering suggestions and reassurance, and arranging services you need.

This message has taken many different forms in specific programs. At one end of the spectrum, programs have delivered a "tough love" message by stressing activity monitoring and program requirements more than personal support, and issuing penalties of some kind for failing to meet these demands. At the other extreme, programs have primarily sought to provide support for the youth's overall development with counseling, mentoring, and listening. Regardless of the exact form, adults in successful programs have tried to give youths the structure and motivation to do well.

Financial Incentives

Many of the successful programs to be discussed have given youths financial incentives to succeed, rewarding good effort and penalizing poor performance. Again, the form of the incentives (or disincentives) has differed – payments, allowances, welfare grant reductions, and contributions to college funds – but the message has been the same: Your success or failure will have financial consequences. Importantly, the financial incentives have reinforced the program message discussed above: The rewards and/or penalties have resulted directly from the monitoring, and they have accompanied the praise and criticism that staff have given.

It appears that financial incentives have worked better for in-school youths than dropouts, particularly the dropouts who have been out of school for some time.

Support for Achievement

It is critically important that young people feel successful as they participate in a program and develop as individuals. Adult contact and financial incentives help to reinforce youths' sense of success and discourage behavior that impedes their progress toward academic and labour market success. To feel really successful, however, many

young people need to experience achievement quickly and often, reducing their worries about failure as well as their impatience to reach their goals. When program participation lasts a relatively short time, this is less of an issue so long as program completion results in some form of recognition for their achievement such as a diploma or certificate. However, the longer it takes to complete a program, the greater the likelihood that participating youths will sense failure or lose interest. The worst scenario, often present in traditional high schools, is that the program seems interminable and its content seems unrelated to youths' objectives.[22]

Successful programs support achievement both by providing high-quality services and by developing a strong achievement "message." The ingredients in high-quality services are no secret: well-trained staff, a first-rate curriculum, flexibility (such as open entry, open exit programs in basic education), and clearly established goals. Creating the right message, on the other hand, may involve many different things, depending on the type of program intervention: the curriculum may focus on achievement, staff may recite the success stories of past program participants, achievement may be rewarded (financially and in other ways), and milestones may be established along the way to program completion, so that youths do not wait long for recognition of their achievement.

A program can also facilitate achievement by minimizing the number of program "hoops" and accelerating youths' movement through them. One noteworthy way of doing this is offering education and vocational training concurrently rather than requiring that the education component be completed before vocational training begins. In this way, too, youths feel they are advancing toward their goal of getting a good job from the outset.

Early intervention

Finally, it is more likely that programs will succeed when they begin working with youths at the first sign of serious trouble – before problems have grown to be insurmountable – or even sooner, targeting at-risk youths before problems have been encountered. Moreover, evaluation studies have consistently indicated that programs are more effective for younger youths and, among those who have had trouble (e.g., youths who have dropped out of school, got pregnant, or had a brush with the law), have done more for youths who were reached quickly than for youths reached after some delay.

For in-school youths, early program interventions occur before students have fallen substantially behind their age-for-grade level. Programs typically have had much more difficulty working with school dropouts. However, when programs target dropouts, it helps for program participation to commence as soon as possible after a young people have left school and before they have fallen far behind their peers.

PROGRAMS FOR IN-SCHOOL YOUTH

[22]For a journalist's descriptions of such a school environment, see Sykes, 1995.

In-school programs for disadvantaged youths have most often been targeted to youths at risk of dropping out of school, because it has been well documented that dropouts are far less successful in the labour market than those who complete high school.[23] Many programs, using a variety of approaches, have sought to prevent youths from leaving school. Unfortunately, few of the programs have been rigorously evaluated.[24]

While all of the programs that have been evaluated were directed to youths who were enrolled school, it is important to recognize that most have targeted groups within this population. For example, two of the programs discussed below targeted pregnant and parenting teenagers on welfare, who are mostly female. Two others targeted youths on welfare, which includes, in addition to pregnant and parenting teens, male and female youths who are not parents. Still others have served youths from low-income families, only some of whom received welfare.

It is also noteworthy that, while all of these programs were intended to keep youths in school in the short run, they were designed to achieve different objectives in the long run. Some were designed to increase eventual college enrollment by targeted youths. In contrast, others were designed to increase employment and wages (college enrollment was allowed, but not encouraged) and, for youths on welfare, this employment was intended to reduce welfare dependency.

Quantum Opportunities Program (QOP)

QOP, a small-scale program that operated in the early 1990s in five large cities in the US,[25] was managed by Opportunities Industrialization Centers of America and was evaluated, using an experimental research design, by the Center for Human Resources at Brandeis University.[26] As indicated in Table 1, QOP clearly had all four of the program features identified above, as well as several other noteworthy traits. In the table, which scores programs according to the presence or absence of the four characteristics, the program was given a "3" (the highest score) for all four traits. QOP intervened at the beginning of youths' high school careers, randomly selecting 25 ninth-graders from families on welfare in each of the cities, and linking them with three types of services: education

---

[23]See, for example, Levy and Murnane, 1992.

[24]The United States Government Accounting Office found that only 20 of the 454 dropout prevention programs it identified (4 percent) had been rigorously evaluated; cited by Grossman and Halpern-Felsher, 1993. In addition, while some programs have been the subject of experimental or quasi-experimental assessments, few of these studies have addressed the programs' long-term impacts (as opposed to the short-term impacts on attendance and academic achievement).

[25]One of the five cities, Milwaukee, was dropped because program operators there were not able to implement the QOP model as the program's designers intended.

[26]Hahn et al., 1994.

activities (such as tutoring and help with homework), service activities (community service projects), and development activities (college and job planning, life skills instruction).

The program's explicit goal was to provide continuous adult support for each young person throughout his or her high school years. Indeed, the program's philosophy was "once in QOP, always in QOP." Program staff tracked the whereabouts and activities of each young person, made home visits, were empathic, and tried to motivate the youths. In combining intensive services with continuing personal support, the program stressed individual responsibility, opportunity, and investment. Young people's achievements were acknowledged not only by staff, but by other program participants (staff and participants became "an extended family whose sole purpose is to nurture their success") – earning the program a "3" for promoting achievement in Table 1.

QOP students also were financially rewarded for good performance. Students received hourly stipends for participating in the program activities, starting at $1.00 and rising to $1.33. After completing 100 hours, participants received a $100 bonus and an equal amount invested into a trust fund for their post-secondary education. (Interestingly, QOP staff also received bonus payments and incentives to do whatever it took to keep youths in the program.)

The QOP evaluation compared 100 program group students in four cities to 100 randomly selected control students from the same locations. The results were dramatic. At the end of the demonstration period, 63 percent of the QOP students had graduated from high school compared to 42 percent of control group members. Most QOP students who hadn't graduated were still enrolled in school, working toward their diplomas; only 23 percent of the program group had dropped out of school, while 50 percent of control group students were no longer enrolled. Moreover, 42 percent of QOP students were enrolled in post-secondary education compared to 16 percent of the control group. In addition, significantly fewer QOP youth became parents during the study period. Positive impacts were measured at all four sites, but the effects in Philadelphia were much larger than those found elsewhere. The cost of QOP was relatively high (about $10,000 per youth over a four-year period) and the program operated on a small scale, but the results are nonetheless striking.

The QOP model is currently being replicated by programs around the country with funding from the U.S. Department of Labor. An experimental evaluation, with much larger samples of randomly selected youths in the program and control groups than in the Brandeis study, is being conducted.

Table 1

Scores for Key Characteristics[27]

PROGRAMS FOR IN-SCHOOL YOUTHS

Program	Description	Cost	Adult Contact	Financial Incentives	Achievement Support	Early Intervention	Evaluation Results
QOP	Provides tutoring, community service projects, life skills training, and college/job planning to disadvantaged high school students, beginning in the ninth grade. Pays stipends, contributes to college/training trust funds.	$10,000/ per youth over four years	3	3	3	3	Random assignment study showed large and statistically significant impacts on high school graduation, post secondary education, and teen births.
LEAP	Requires regular school or GED program attendance by teen parents on welfare. Welfare grant increased, reduced, left the same depending on attendance. Provides case management, help with child care, and transportation.	$1,000/ per youth over two years	3	3	2/3	3	Random assignment study showed significant impacts on high school attendance, high school or GED completion, employment, and welfare receipt.
TPD	Requires enrollment in school, GED, or training program by teen parents on welfare. Welfare grant reduced when teen not enrolled. Provides case management, help with child care, and transportation.	$2,200/ per youth over two years	3	3	2	2	Random assignment evaluation found significant impacts on enrollment in school and training, employment and earnings, and welfare receipt.

[27] A score of 3 means the characteristic is consistent and strong in the program for all youths it served; a score of 2 means the characteristic is present most of the time, but not always, or is weaker or less than a score of 3 would indicate; a score of 1 means the characteristic is present at least to some extent; and a score of zero means the characteristic is not present. A split score (e.g. 1/2) means that some program sites met the criteria for the higher score and other sites did not.

Program	Description	Cost	Adult Contact	Financial Incentives	Achievement Support	Early Intervention	Evaluation Results
STEP	Provides summer academic instruction, family planning, life skills training, and summer jobs to 14 and 15 year olds from low-income families. Pays hourly stipend	$3,000/ per youth over 1½ years	2	1	2	3	Random assignment evaluation found short-term effects on reading, math, and knowledge of birth control methods, but no long-run impacts.
Career Beginning	Provides academic help, summer jobs, workshops on college admission and financial aid, and counseling in education and career choices. Assigned youths to adult mentors in the community.	NA[28]	2	1	2	1	Random assignment study showed significant impacts on college enrollment.
YIEPP	Guaranteed school-year and summer jobs to disadvantaged youths who stayed in or returned to school and met school and job performance standards. Paid minimum wage in jobs.	N/A	2	2	2	2	Comparison-site study found dramatic effects on employment and modest impacts on school enrollment during the in-program period. Long-term impacts were not significant.
California Partnership Academies	A "school within a school" with curriculum built around an occupational area. Provides work on internships and employer mentors.	N/A	3	0	3	2	Comparison-group study showed significant impacts.

[28]Not available.

Program	Description	Cost	Adult Contact	Financial Incentives	Achievement Support	Early Intervention	Evaluation Results
Dropout Prevention & Reentry Projects	One model was partnership academies; others provided vocational coursework, tutoring, basic skills remediation, counseling, and payments for school attendance.	N/A	2/3	2	2/3	2	Comparison-group study of academies found significant impacts at one of two sites; random-assignment study of other models found significant impacts on dropout rates at some sites.
BB/BSA	Provides one-to-one-mentoring by volunteer mentor to youths of ages 10 to 16.	N/A	3	0	2/3	2/3	Random-assignment evaluation found significant impacts on school attendance and on drug and alcohol use.

The Learning, Earning, and Parenting (LEAP) Program

Like QOP, LEAP clearly has the first three features that were identified as important, as indicated by its scores in Table 1. Unlike QOP, however, LEAP is a large-scale, ongoing, mandatory-participation program that has operated in Ohio since 1989. Moreover, LEAP targets a particularly difficult subset of youths from welfare families: custodial teen parents and pregnant teenagers who have not completed high school or a GED. LEAP receives a lower score for early intervention. The program certainly intends to reach teens quickly: Teens become mandatory for LEAP as soon as they become pregnant with their first child (if they are already on welfare) or their application for welfare is approved (if they are already pregnant or a parent). During LEAP's first two years, however, this did not always happen. Moreover, even when it did, the intervention was usually later than in QOP (typically during the sophomore or junior year for LEAP teens, as opposed to the beginning of the freshman year in QOP).

LEAP's financial incentives involve bonus payments and welfare grant reductions. Under LEAP rules, teens who attend school regularly have $62 added to their monthly welfare grant. Teens who fail to attend regularly and do not have valid excuses have $62 subtracted from their grant. Teens also receive assistance with child care and transportation so long as they are attending school regularly. This financial incentive structure serves to encourage achievement, and staff in most program sites have strengthened the achievement message by positively reinforcing the academic success of each teen and going out of their way to help remove barriers to school attendance and success.

The adult-contact component of LEAP is strong. Each teen is assigned to a case manager in the county welfare agency, who continuously monitors her school attendance, initiates the bonuses and penalties, and makes referrals for services.

MDRC's evaluation of LEAP, based on an experimental research design, indicates that LEAP has substantially increased school enrollment and attendance by teens who were already enrolled in school when they started LEAP: 61 percent of in-school teens remained enrolled during their first year in the program, compared to 51 percent of control teens, and LEAP teens attended school more regularly during the time they were enrolled.[29] Three years after becoming eligible for LEAP, 66 percent of in-school teens in LEAP had completed high school or a GED or were still enrolled in school, compared to 57 percent of the control group. Moreover, 39 percent of the in-school program group held a job at the three-year point, compared to 27 percent of control teens, and fewer teens were still receiving welfare.[30] (However, as discussed below, LEAP did not produce significant impacts for out-of-school youths.)

---

[29]D. Bloom et al., 1993.

[30]D. Long et al., 1996.

Early intervention appeared to be important to LEAP's success. First, LEAP's largest impact on school enrollment has been for teens who were pregnant with their first child when they started LEAP; the program had a somewhat smaller effect on teens who started with one child, and a statistically insignificant effect on teens with two or more children. Second, among in-school teens, LEAP had a larger impact on school completion by teens who were under age 18, and at or close to their age-for-grade level, than it did on completion by teens who were older or more than a year behind grade level.

It is also noteworthy that special services seemed to enhance program effectiveness. As part of a demonstration program in Cleveland, half of the program group received special services – including in-school day care and school-based case managers – and half did not. This increased adult support and monitoring, and provided teens more recognition of their achievements in school. Among teens who attended high school for at least a month, the ones who received the services were significantly more likely to graduate or earn a GED than the other group.[31]

LEAP's cost was relatively low: $971 per teen (or about $537 per teen per year). The enhanced school-based services cost an additional $1,426 per teen.

The Teenage Parent Demonstration (TDP)

TPD was similar to LEAP in that it was a mandatory program, it targeted teenage parents on welfare, and it emphasized education. It was different, however, because it operated as a demonstration program, between 1987 and 1991, in three sites – Newark and Camden, New Jersey, and part of Chicago. Teens were required to participate in education, training, or job search, and those who failed to participate were subject to the financial penalty of having their welfare grants reduced (TPD did not offer bonus payments). As in LEAP, case managers monitored teens' school and training program enrollment, and support services were provided to eligible teens.

Thus, TPD also had many of the key characteristics noted at the outset. It intervened relatively early in students' lives – at the same time as LEAP and later than QOP – and offered support services that were similar to those in LEAP. TPD used financial incentives, although they were different from the other two programs: TPD imposed only penalties, while QOP used rewards and LEAP employed both rewards and penalties. Finally, as in the other two programs, youths were monitored and counseled by program staff over an extended period.

The evaluation of TPD, conducted by Mathematica Policy Research employing an experimental research design, also showed that the program achieved some success. The program raised the in-school teens' employment rate and increased their average earnings by $38 per month. It also reduced welfare receipt by about seven percent. Both the employment and welfare effects were present at only two of the three sites, and school

[31]D. Long et al., 1994.

completion rates increased in only one of the sites. Also, the impacts were much larger for some groups of teens than for others. TPD's cost, about $2,200 per teen per year, was higher than LEAP's, but lower than QOP's.[32]

The Summer Training and Employment Program (STEP)

STEP is an ongoing program that combines academic instruction, life skills training (emphasizing pregnancy prevention), and summer jobs for economically disadvantaged 14- and 15-year-olds (not necessarily on welfare). The program aims to prevent two causes of dropping out of school: poor academic performance (which results partly from "summer learning loss"[33]) and teen parenting. STEP's activities focus on two summers, with limited program contact with youths during the intervening academic year. The program thus offered early intervention (similar to QOP) and service activities (more limited than QOP, and different from those in LEAP and TPD). However, as indicated by its score in Table 1, STEP provided a relatively weak financial incentive that consisted of a summer job, which was not tied to performance (other than program enrollment), and a small hourly stipend for each hour of participation (which was also available to the control group for work activities). The program, with its limited activity between the two summers, also did not provide sustained adult contact of the kind received by youth in QOP, LEAP, and TPD.

A random assignment evaluation of STEP, carried out between 1984 and 1990 by Public/Private Ventures, found some short-term positive results, indicating that the program helped participating students improve their reading and math scores, and learn more about birth control, by the end of each summer. However, STEP had no long-term effects on educational outcomes, including grades, test scores, and graduation rates. STEP's cost was about $3,000 per teen.[34]

In retrospect, researchers offered the opinion that the very limited program involvement with youths between the two summers of STEP activities had been a major weakness of the program.[35] STEP is being modified and strengthened to provide more sustained support, including an extension of the program into later high school years.

Career Beginnings

---

[32]Maynard, Nicholson and Rangarajan, 1993.

[33]Previous research found that this loss, which refers to a regression in test scores over a summer due to the break from school, was a major determinant of poor academic performance by disadvantaged, at-risk students. See Heyns, 1987.

[34]Walker and Vilella-Velez, 1992.

[35]Ibid. The authors said that STEP had "weak or nonexistent mechanisms to connect the summer experience to the school year."

Career Beginnings, which was also targeted to urban high school students from low-income families, operated as a demonstration program in 24 cities around the country. The intervention started in the students' junior year, which is later than in QOP, STEP and (on average) the other two programs discussed above. The program was intended to encourage students to attend college. The services offered included jobs during the summer between the students' junior and senior years, workshops and classes on topics such as taking college entrance examinations and applying for financial aid, counseling in educational and career choices, and extra academic help. The only financial incentive was the summer job. Students were assigned to adult mentors in the community, who actively helped youths, but did not monitor their progress.

Using an experimental research design, MDRC's evaluation of Career Beginnings found that it generated an increase in college enrollment rates: 53 percent of the program group ever enrolled in college during the first year after starting the program, compared to 49 percent of the control group. The two city programs, judged to have implemented the program most effectively, had larger impacts (more than double the size of the average effect), and the other sites had relatively poorer results. Career Beginnings was evaluated in the late 1980s, but the program has continued as an ongoing program.[36]

The Youth Incentive Entitlement Pilot Projects (YIEPP)

YIEPP, which operated in the late 1970s and early 1980s, guaranteed part-time school-year and full-time summer jobs to disadvantaged youths (16-19 years old) who stayed in or returned to school. The jobs paid the minimum wage so long as youths met school and job performance standards, creating a potentially strong financial incentive. However, researchers characterized the program staff's performance monitoring as "haphazard," making it unclear whether youths recognized the connection between attending school and keeping their jobs.[37] Moreover, staff-youth contact was relatively limited.[38]

The project provided jobs to 76,000 youths in 17 communities and achieved one of its primary objectives: Because of the guaranteed jobs, there was a dramatic increase in employment rates, especially among African-American youths, in the demonstration sites. The program virtually eliminated the disparity between white and African-American youth unemployment rates in the 17 communities. There was also a significant increase in the

---

[36]Cave and Quint, 1990.

[37]Farkas et al., 1982) The authors reported that staff usually were able to determine whether or not participants were enrolled in school, but not whether they actually attended school on a regular basis.

[38]Ibid.. The authors reported that staff met with participants an average of 1.8 times per month. However, three of the four most common reasons for the meetings were attending an orientation meeting (in a group, not one-on-one), educational or aptitude testing (unrelated to participant performance), and to pick up transportation reimbursements.

earnings of participants, compared with comparison group youths, during the period they were enrolled in the program.

YIEPP demonstrated that disadvantaged youths are eager to work when jobs are available, and also confirmed the feasibility of large-scale public employment programs for this group. However, the findings of a quasi-experimental evaluation by Abt Associates indicated that the program did not lead to improvements in school attendance or graduation.[39]

California's Partnership Academies

Career academies are one of several school-to-work approaches that have been tried in many locations in the United States. One of these programs, California's Partnership Academies, has been evaluated using a quasi-experimental research design. These academies are small-scale, intensive programs for students in grades ten through twelve who have low grades and a poor attendance record, and who are considered at risk of dropping out. The intervention consequently comes somewhat later in students' lives than QOP, and at roughly the same point as LEAP and TPD.

Each academy is a small-scale "school within a school," targeting a particular occupational area, such as health occupations, computer technology, or the financial services industry. The curriculum is integrated around the career theme, and students have an opportunity to apply what they learn in the classroom in work internships. Students in an academy stay with a small group of academy teachers for several years, and individual tutoring is provided as needed. Each student is assigned to a mentor from a local employer. Two explicit objectives of the academies are to substantially increase adult-student interaction (compared to regular schools) and to provide role models for the students.

The academies do not use financial incentives except for wages paid in the summer internships, and those wages are not directly tied to school performance.

The evaluation study found that academy students had better attendance and academic performance, and were significantly less likely to drop out, than students in a comparison group. The program cut the high school dropout rate from 14 percent for the comparison group to 7 percent for the program group. The improvements in attendance and grades were relatively modest. The results also varied considerably from school to school, with several schools having no positive impacts on any of these outcomes.[40]

MDRC is currently conducting a random assignment test of Career Academies in ten high schools around the country, including academies in California.

---

[39]Ibid.

[40]Stern et al., 1989.

Dropout Prevention and Reentry Projects in Vocational Education

A series of demonstration programs in both urban and rural areas, mounted by the US Department of Education in the 1980s, sought to reduce the likelihood of students to drop out of school using program models that emphasized vocational education. One of the models was California's Partnership Academy approach. A quasi-experimental evaluation of two sites found that one achieved results comparable to those discussed above, but the other had no impact on any of the education measures.[41]

The other models provided vocational coursework (the amount varied by site), individual tutoring or other academic assistance, special study materials, basic skills remediation (in some sites), counseling, and payments for school attendance (some sites). No work experience or mentoring was offered. Experimental evaluations conducted by the Research Triangle Institute indicated that the largest two sites (in Detroit and Cushing, Oklahoma) produced significant positive results, cutting high school dropout rates by more than half over a two-year follow-up period (26 and 22 percent for the control groups in Detroit and Cushing respectively, versus 11 and 10 percent for the two program groups). However, the other sites (some of which had to be pooled to provide adequate samples for the research) did not generate significant positive impacts.[42]

Big Brothers/Big Sisters of America (BB/BSA)

BB/BSA has provided one-to-one mentoring by adult volunteers to pre-teen and teenage youths, usually from single parent homes, for many years. In an evaluation of BB/BSA by Public/Private Ventures, the youths ranged in age from 10 to 16 when they were matched with an adult; 83 percent came from households with incomes under $25,000 and 43 percent came from families on welfare. BB/BSA adult mentors are recruited, screened, and trained, and then matched with a youth on the basis of adult and youth preferences and geography. On average, the adult-youth pairs in the evaluation met for 3-4 hours three times per month for at least a year.

The evaluation showed that youths in BB/BSA had better school attendance during the 18 months they were followed: Youths in the program group missed half as many days of school as did those in the control group. Program group youths were also less likely than controls to initiate drug and alcohol use. The evaluation did not look at longer-term outcomes such as school completion, employment, and public assistance receipt.[43]

---

[41]Hayward and Tallmadge, 1993.

[42]Ibid.

[43]Tierney and Grossman, 1995).

PROGRAMS FOR SCHOOL DROPOUTS

Programs for in-school youths have achieved some success in improving school retention and completion rates. However, many young people still fail in the mainstream education system and drop out before they graduate. Many of these youths belong to the same groups discussed in the previous section: some are teen parents and many come from welfare families and other low-income households. Others have very poor basic skills, criminal records, drug abuse problems, family problems, and other serious obstacles to regular school attendance, which creates another hard-to-serve group within the dropout population.

Programs using "second chance" program models to reengage these youths, and prepare them for the labour market, have achieved far less success than the programs targeting in-school youths. Indeed, some of the programs discussed above were successful serving in-school youths, but were much less successful with that dropouts.

LEAP Program

One of these programs is LEAP, which targets teenage parents on welfare. The program model used for dropouts was exactly the same as that for in-school teens (discussed previously), but the evaluation results were not. Although LEAP induced many dropouts to return to school or a GED program, it did not have an appreciable effect on their rate of high school graduation, GED receipt, or employment. The program did have some success working with dropouts who were 17 years old or younger (LEAP had a significant impact on their graduation rate), but it was completely ineffective in altering the school completion and employment behavior of older dropouts, who outnumber their younger counterparts. This underscores the importance of early program intervention with this population.

This lack of success is particularly troubling in LEAP, because the program imposed numerous financial penalties on dropouts. Indeed, approximately a quarter of the dropouts in LEAP received nine or more grant reductions and no bonus payments while they were eligible for the program. Teens whose welfare grants had been reduced many times reported diminished spending on essentials for their children as well as themselves.

TPD Program

The evaluation results for the Teenage Parent Demonstration are also much less encouraging for dropouts than they were for in-school teens. For example, while TPD had a modest impact on employment, the earnings of dropouts in the program and control groups were approximately the same.

New Chance

The New Chance demonstration sought to improve the economic prospects and overall well-being of low-income young mothers and their children through a comprehensive and intensive set of services. New Chance targeted families headed by mothers aged 16 to 22 who gave birth during their teenage years, were on welfare, and had dropped out of school – a population that is very similar to the dropouts served by LEAP and TPD. The demonstration tested a program model providing education, training, and a broad range of support services for participants and their children. New Chance operated as a demonstration between 1989 and 1992 at 16 locations across the country (12 sites are still operating). Unlike LEAP and TPD, participation by young mothers in New Chance was voluntary.

The New Chance program involved close contact between program staff and participants during the education phase of the program, when participants were assigned to a case manager with an intentionally small caseload. New Chance staff were warm and supporting, but also demanding. However, there was much less contact during the subsequent vocational training phase (participants were referred to other agencies for training). The program also provided a comprehensive set of services for young mothers and, unlike most programs, their children; these included education services (both instruction in basic academic skills and preparation for the GED); employment development (career exploration and instruction in pre-employment skills and job search techniques); a variety of personal development services (health education classes and health care services at some sites, family planning classes, and parenting and life skills education; and high-quality child care (including a strong child development component). New Chance did not use financial incentives, although some sites offered non-cash prizes for good attendance. Finally, the New Chance intervention came at roughly the same point as LEAP's and TPD's for some young mothers, but later for others.

The evaluation of New Chance, conducted by MDRC using an experimental research design, has shown that the program had a positive impact on education outcomes. Young women in the program group were much more likely to earn a GED than those in the control group: 37 percent of the program group did so with a year and a half of starting New Chance, compared to 21 percent of the control group. The program group also earned more college credits than the control group.

However, program and control women were comparable with regard to a number of other outcomes for which it had been hoped the program would produce a positive impact. For example, the groups were similar in measures of reading skills, drug use, and health, while the program group may actually have felt more stress and experienced more bouts with depression. As expected, given their greater investment of time in education and training, women in the program group were initially less likely than controls to be employed and, over time, the employment rates of the two group grew more similar, but the

Table 2

Scores for Key Characteristics[44]

PROGRAM S FOR OUT-OF-SCHOOL YOUTHS

Program	Description	Cost	Adult Contact	Financial Incentives	Achievement Support	Early Intervention	Evaluation
LEAP	Requires regular school or GED program attendance by teen parents on welfare. Welfare grant increased, reduced or left the same depending on attendance. Provides case management, help with child care, and transportation.	$1,000/ per youth over two years	3	3	2/3	2	Random assignment study showed significant impacts on school attendance, but not on school or GED completion, employment, or welfare receipt.
TPD	Requires enrollment in school, GED, or training program by teen parents starting welfare. Welfare reduced when teen not enrolled. Provides case management, help with child care, and transportation.	$2,000/ per youth over two years	3	3	2	2	Random assignment study showed significant impacts on school enrollment, but not on outcomes.
New Chance	Provides GED education, vocational training, life skills training, and high-quality child care to adolescent parents who dropped out of school. Intensive case management and other assistance provided.	$10,000/ per youth over two years	3	0/1	2	2	Random assignment study showed significant impacts on high school graduation, post-secondary education.

[44]A score of 3 means the characteristic is consistent and strong in the program for all youths it served; a score of 2 means the characteristic is present most of the time, but not always, or is weaker or less than a score of 3 would indicate; a score of 1 means the characteristic is present at least to some extent; and a score of zero means the characteristic is not present. A split score (e.g. 1/2) means that some program sites met the criteria for the higher score and other sites did not.

Program	Description	Cost	Adult Contact	Financial Incentives	Achievement Support	Early Intervention	Evaluation
Project Redirection	Provides GED education, vocational training, and life skills to adolescent parents who dropped out of school.	$5,000/ per youth over two years	3	0	2	2	Random assignment study showed few short-term effects but significant long-term impacts on employment and welfare receipt.
JTPA/ CETA	JTPA (and CETA before it) provides on-the-job training, classroom training, and job search assistance to disadvantaged youths. Support services are also provided.	$2,000/ per youth over one year	1	0	1	1	Random assignment study of JTPA showed no impacts on youths, with some exceptions, e.g. impact on employment of female youths assigned to classroom training.
Job Corps	Residential program that provides skill training, basic education, support services, and job placement to disadvantaged youths aged 16 to 21. 90% of enrollees are high school dropouts.	$10,000/ per youth over ten months	3	2	3	1	Comparison study group found significant impacts on employment, serious crime, GED completion and college enrollment.
Jobstart	Provided vocational training, basic education, and job placement to high school dropouts with low reading skills.	$4,000/ per youth over seven months	3	2	2	1	Random assignment study found no significant impacts on employment, welfare receipt. However, CET site in San Jose had large and significant impacts.
CCC	Residential work experience and conservation program in California. Assignments to small work crews.	$3,000/ per youth over one year	3	2	2	1	Random assignment study found significant impacts on earnings of disadvantaged youth (not on earnings of non-disadvantaged youths).

Program	Description	Cost	Adult Contact	Financial Incentives	Achievement Support	Early Intervention	Evaluation
Supported Work	Provided full-time, paid employment work to several disadvantaged groups, including high school dropouts between the ages of 17 and 20. Some jobs were in crews of supported workers, while others were individual assignments in public or nonprofit organizations.	$10,000	3	3	2/3	1	Random assignment study found no significant overall impacts. However, reanalysis found effects for youth assigned to work crews (no impacts for youths assigned to individual positions).
Youth Corps	Provides academic and vocational training to youths between the ages of 18 and 25. Subsequent assignments to work crews.	N/A	3	2	2	1	Random assignment study found significant impacts on employment.

employment and earnings of New Chance participants never overtook those of the controls. Unexpectedly, program group women were more likely to have a pregnancy than controls, although this effect was linked with the positive program impact on young women living with their husband or partner.[45]

It is important to note, however, that the New Chance control group received extensive services on its own. Close to 70 percent of controls participated in an education or skills training program during the two years following random assignment. Thus, the evaluation compared New Chance's comprehensive, intensive set of services to the less extensive, but still substantial services obtained by the control group.

Project Redirection

Project Redirection was similar to New Chance in many ways, but it intervened earlier in adolescent mothers' lives – participants were aged 17 or younger, lacked a high school diploma, and were receiving (or eligible to receive) welfare. Like New Chance, the program offered comprehensive services that were designed to enhance the teens' educational, job-related, parenting, and life-management skills. However, the services in Project Redirection differed from New Chance in two important respects: (1) the services were "brokered" by the program rather than all provided by the program itself, and (2) the program paired teens with mentors, adult women in the community who volunteered to provide ongoing support, guidance, and friendship. As in New Chance, no financial incentives were used.

The program was evaluated using a quasi-experimental research design. The pattern of findings over the five-year study period was uneven: At the one-year point, the results indicated improvements in education, employment, and fertility; the results were less favorable after two years; and at the five-year point, the program group had significantly better outcomes than the comparison group in terms of employment and welfare dependency. After five years, the program group worked 40 percent more than comparison mothers (an average of 13 hours compared to 9 hours), and 10 percent fewer program participants received welfare than their counterparts in the comparison group (49 percent compared to 59 percent).[46]

CETA and JTPA

Most skills training programs for disadvantaged youths have not produced positive labour market effects. The most important evidence in this area comes from evaluations of

---

[45]Quint, Polit, Bos, and Cave, 1994.

[46]Polit, Quint, and Riccio, 1988.

the Comprehensive Employment and Training Act (CETA) and the Job Training Partnership Act (JTPA). CETA was the major job training initiative of the federal government in the 1970s, funding local CETA programs throughout the country. The program was a huge funding umbrella (in 1979, CETA spent about $6 billion on training and public service jobs for youths), for an enormous number of local employment programs using whatever program approach they chose.

The major studies of the program's effects all concluded that CETA had no impact on post-program earnings. The earnings of CETA youth trainees, both male and female, were no higher than those of comparable youths.[47] However, these CETA studies did not use random assignment, and the reliability of their quasi-experimental research designs has been questioned.

In 1982, JTPA replaced CETA as the major federal training program and, like CETA, it has funded a large number of training programs for youths. In 1992, JTPA enrolled 125,000 out-of-school youths aged 16 to 21. Half of these were high school dropouts and half had completed school successfully. JTPA funds a variety of program approaches – on-the-job training, vocational and basic skills education, and work experience – to improve youths' poor employment prospects.

JTPA programs offer youths tangible, valuable services, but usually do not involve sustained adult-youth contact or financial incentives. It is worth noting, too, that work cannot be linked with training for dropouts because of JTPA rules that make it extremely difficult for programs to provide paid work experience to participants. Finally, program interventions in JTPA typically start in a young person's late teens or early twenties, after he or she has completed high school or, if a dropout, has been out of school for an extended period.

The experimental evaluation of JTPA, conducted by MDRC and Abt Associates, measured the impacts of JTPA's short-term classroom training and OJT services for out-of-school youths. The results were discouraging: Youths in the program group did not earn more than youth in the control group over a 30-month follow-up period. (It is important to note that the JTPA study covered a period prior to the 1992 amendments that reshaped the JTPA system and created a separate funding stream for youth programs.)[48]

Job Corps

---

[47]See Barnow, 1987, which summarizes results from a number of studies, including Dickerson, Johnson, and West, 1984. As in YIEPP, researchers found a significant impact on the employment rate of program group members assigned to public service jobs, while they were in the program; a post-program difference was found for female youths only.

[48]Bloom et al., 1994.

One model that has achieved well-publicized, positive results for dropouts is the 30-year-old Job Corps program. Job Corps provides education, training, and support services to disadvantaged youth – mostly high school dropouts – in a residential setting. Job Corps offers more clearly valuable services than any other program for youths: room and board, complete medical and dental care, basic skills and GED classes, a vast number of training options, job placement help, and many others. The assistance provided to youths has a strong employment focus. For example, vocational training is provided concurrently with education in most Job Corps centers, students' basic skills and GED classroom work uses pertinent examples from the labour market (e.g., using carpentry measurement problems to teach about fractions and health-related words and articles to teach spelling and reading), training programs lead to job placements, and so forth.

In large part because it is a residential program, the adult-youth contact is more sustained and intensive than in any other program targeted to youths. Performance monitoring – of performance both in the classroom and behaviour outside it – is thorough to the point of being obsessive. The program strongly encourages achievement with a variety of prizes and other forms of recognition. Participants also receive support through counseling, therapy (from on-site psychologists and social workers), and camaraderie.

Job Corps uses financial incentives, primarily monthly incentive payments for good performance and another payment when youths graduate. There are also many non-financial rewards, as well as an elaborate disciplinary system (involving staff and participants) that hands out penalties to participants for breaking program rules.

At the time of the evaluation, most youths began Job Corps when they were fairly young: a quarter were aged 14-16, and another quarter were 17. However, some participants started at age 19-21. Close to 90 percent had not finished high school.

A quasi-experimental study of Job Corps, completed by Mathematica Policy Research in the early 1980s, found that the program produced significant increases in educational attainment, as well as post-program employment and earnings. The program also reduced welfare receipt and dramatically reduced serious crime (mostly during the period that youths were enrolled in the program).[49] Despite the program's high cost (more than $15,000 per participant), the study found that Job Corps was cost effective. Indeed, it returned about $1.45 for every dollar invested in the program.[50]

A new evaluation of Job Corps, based on an experimental research design, is currently being conducted by Mathematica Policy Research. It will produce preliminary evaluation results in 1998.

---

[49]Mallar et al., 1982.

[50]Long, Mallar, and Thornton, 1981.

While the Job Corps has been shown to be effective, its model is not ideal for all high school dropouts. The program's residential model is not appropriate for all young people, and its cost is too high to serve all eligible youths. Thus, policy-makers have sought to identify less expensive, non-residential models that are effective for dropouts.

Jobstart

One such model, essentially a nonresidential version of the Job Corps, was tested in the Jobstart demonstration conducted by MDRC in the 1980s and early 1990s. Indeed, three of the program sites were Job Corps Centers that operated nonresidential programs (Job Corps had few nonresidential programs at the time of the evaluation, but subsequently increased the number). Most of the other sites, which targeted high school dropouts with low reading levels, explicitly sought to replicate elements of the Job Corps model in a non-residential setting. Participants received basic education, training, and job placement help. Most of the other ten Jobstart sites operated within the constraints of the JTPA funding structure. MDRC's evaluation of the program was based on an experimental research design. The study showed that Jobstart produced large increases in the proportion of youth who obtained a GED, but that these educational gains did not translate into improved labour market performance or in reduced welfare receipt over the four years of follow-up.[51]

However, one Jobstart site achieved startling success: the Center for Employment Training (CET), a nonprofit organization based in San Jose, California. CET was involved in another random assignment evaluation – the Minority Single Parent Program, which served single parents on welfare and was evaluation by Mathematica Policy Research. CET achieved impressive results in both cases. In Jobstart, CET participants earned $3,000 more per year than control group youths, and the average participant costs of approximately $2,000 were on the low end of the JOBSTART sites.

CET's strong results are probably attributable to a combination of factors. The program's training courses are relatively short term (three to six months) but quite intensive. A focus on employment is pervasive: The program maintains close contacts with local employers, and its training courses are taught by experienced technicians from industry. The employer contacts are also used to locate jobs for program graduates.

CET is also known for integrating academic basic skills instruction into vocational training. In other words, instead of starting by teaching basic reading and math skills or preparing students for a GED, CET moves participants directly into hands-on training designed to simulate a workplace. Basic skills instruction is provided as necessary in the context of training. The program is also open-entry, open-exit, with youths staying until they achieve competency. Furthermore, there is a powerful ethnic support component.

---

[51]Cave et al., 1993.

The US Department of Labor is currently funding a replication of the CET model in several Eastern cities. An evaluation of the new sites is planned to see whether they can duplicate the success achieved by the parent program.

California's Conservation Corps (CCC)

Another residential program, less expensive than Job Corps, is the California Conservation Corps (CCC). CCC was a work experience/conservation program that provided out-of-school youths 40 hours per week of paid manual labour. Youths worked in small crews for up to a year. Its goal was to make participants more employable by teaching them how to work hard (by doing it) and to take pride in that work.

A quasi-experimental evaluation conducted by Public/Private Ventures showed that CCC produced significant increases in the post-program earnings of corpsmembers who were economically disadvantaged (but not for non-disadvantaged participants). In addition, the value of the work done by corpsmembers was considerable, largely offsetting the program's costs.[52]

Supported Work

The National Supported Work Demonstration tested a transitional employment program for school dropouts as well as other disadvantaged groups. The dropouts constituted a highly disadvantaged group, many with prior arrest records. The program operated between 1975 and 1981 in eleven locations around the country. Supported Work provided a highly structured work experience program for most participants, but only to about half of the youths. Half of youth participants were assigned to small work "crews" (for example, crews doing housing rehabilitation work) under the constant supervision of a program staff member. Participants were subjected to gradually increasing job expectations on the job. Participants were paid a wage, which increased over time so long as work performance was good.

The evaluation of Supported Work for youths, conducted by Mathematica Policy Research, indicated that its impacts were small. The model produced in-program employment gains and was successful in raising post-program employment rates and earnings for some groups (notably long-term welfare recipients), but had no lasting effects for the dropouts.[53] However, a reanalysis of the data for youths found that the program had indeed been effective for youths assigned to work crews, and completely ineffective for those assigned to work experience positions.[54] This underscores the need for sustained contact between adult staff and youth participants.

---

[52]Wolf, Liederman, and Voith, 1987.

[53]Manpower Demonstration Research Corporation, 1990.

[54]Long, 1987.

Youth Corps

Created by Congressional legislation in 1990, the Youth Corps has operated in approximately 100 locations throughout the U.S. The program works with out-of-school youths between the ages of 18 and 25 using a model that draws on both the Job Corps and Supported Work. Program participants receive academic and vocational skills training, and work in crews on a variety of community service projects (in public parks, nursing homes, etc.). Corpsmembers are paid wages for their work.

An experimental evaluation of eight Corps sites is being conducted by Abt Associates, and the early results are encouraging. The community service projects have provided benefits to communities that are estimated to be worth millions of dollars, and have also substantially increased youths' employment. The employment rate of program group youths has been 99 percent, compared to 73 percent for the control group, and Corpsmembers have also worked 40 percent more hours. As in the Job Corps evaluation, the program has been found to reduce crime: only 12 percent of Corpsmembers have been arrested, compared to 17 percent of control group youths.[55]

YouthBuild

Finally, a program called YouthBuild has recently received a great deal of attention. The program enables young people to rebuild their communities while improving their own lives through leadership development, education, and community service. YouthBuild provides opportunities for young people to develop as leaders by encouraging decision-making that directly affects the program, involving them in community life and providing formal leadership training. Students attend academic classes for about half of their program enrollment time, mastering basic skills and preparing for the high school equivalency (GED) examination. Young people are trained in construction skills for 9-18 months, while they rehabilitate abandoned buildings in urban areas, and construct new housing in rural areas, to provide affordable permanent housing for homeless or low income people. Also built into the program are individual counseling, peer support groups, and recreational and cultural activities. At the end of the program, graduates obtain unsubsidized jobs in the construction industry. Throughout their time in YouthBuild, youths are provided family-like support and firmly encouraged from to stop self-destructive behavior and attitudes.

No experimental or quasi-experimental evaluation is currently planned, although a national evaluation team is documenting efforts of new YouthBuild sites to replicate the success of early programs. Also, the success of Job Corps, CET, and the Conservation Corps, which share many of the key components of YouthBuild, all suggest that this type of program could potentially have large impacts.

---

[55] Jastrzab et al., forthcoming.

CONCLUSIONS

It is helpful at this juncture to return to the discussion of the program features that appear to be critical to success. In light of the findings discussed above, more can be said about the importance and elements of each feature.

Sustained Adult Contact

Most of the successful programs – such as QOP, LEAP, TPD, and Job Corps – represent long-term interventions. This, however, is not a sufficient condition for program effectiveness. For example, the length of the interventions in the less successful STEP and YIEPP program was comparable to those of LEAP and TPD. However, the intensity of the STEP treatment was not maintained through the intervention; it was much stronger during the two summers in which most of its services were offered than during the intervening academic year. And in YIEPP, while there was ongoing contact between program staff and participants, relatively little of it involved one-to-one contact between a staff member and a participant. Also, in one of the most successful programs for youths, CET, the intervention was shorter than in most other programs that have been discussed.

What seems to be important for programs is that they help youths develop sustained relationships with responsible adults who can offer guidance and support and help at-risk youths resist the negative influences they confront on a daily basis, and can set standards for the youths to meet. Sometimes, as in the Job Corps, several program staff – teachers, counselors, and other staff – were cast in this role. In other cases, such as Project Redirection, both a staff member (the case manager) and a volunteer (a mentor) established relationships with a participant. Sometimes, this responsibility fell to a single staff member – for example, CET teachers, who were also expected to be mentors. In Big Brothers/Big Sisters of America, a single volunteer mentor played the role.

Financial Incentives

QOP, LEAP, TPD, Job Corps, and CCC all used financial incentives – rewards, penalties, or both – to help induce changes in behavior. It is not clear whether financial incentives on their own produce effects, but they certainly seem to be a useful tool when employed in conjunction with program monitoring and services.

Support for Achievement

Youths are often impatient to succeed, and become bored or frustrated when they perceive their progress to be slow. The nature of the services offered by programs is consequently very important. The services must not only be effective but, especially for dropouts, must be seen as leading to employment. Thus, especially when youths' academic skills are weak, the idea of combining paid work experience and/or vocational training with education has considerable appeal. The evaluation results for programs such as CET

suggest that at least some young people who have failed in traditional school environments learn better when education and training is directly linked to work skills. This is also the underlying foundation of school-to-work programs. This linking of education and employment allows youths to succeed on terms they more readily appreciate, gaining a foothold in the labour market from which to obtain better jobs and wages.

Early Intervention

The importance of early intervention is consistently underscored by the research results. There are many more examples of successful programs for in-school youths than for dropouts. Moreover, early intervention is easier and potentially cheaper, because it can rely more heavily on the existing mainstream education system. The most expensive program for in-school youths discussed in this paper, QOP, involved a four-year intervention and produced especially impressive results. Moreover, the cost of QOP per youth would probably be lower if the program were operated at a larger scale.

Later in youths' lives, interventions based on the mainstream education system have generally not been effective. Interventions such as the Job Corps have been shown to be effective for dropouts, but this program has involved both the development of specialized program infrastructure and very high cost.

REFERENCES

Ashenfelter, O. 1987. "The Case for Evaluating Training Programs with Randomized Trials." *Economics of Education Review* 6(4): 333-338.

Barnow, B. 1987. "The Impact of CETA Programs on Earnings." *Journal of Human Resources* 22(2): 157-191.

Bloom, D., V. Fellerath, D. Long, and R. Wood. 1993. *LEAP: Interim Findings on a Welfare Initiative to Improve School Attendance Among Teenage Parents*. New York: Manpower Demonstration Research Corporation.

Bloom, H. S., et al. 1994. *The National JTPA Study: Overview of Impacts, Benefits, and Costs of Title II-A*. Cambridge, MA: Abt Associates.

Cave, G., and J. Quint. 1990. *Career Beginnings Impact Evaluation: Findings from a Program for Disadvantaged High School Students*. New York: Manpower Demonstration Research Corporation.

Cave, G., F. Doolittle, H. Bos, and C. Toussaint. 1993. *JOBSTART: Final Report on a Program for High School Dropouts*. New York: Manpower Demonstration Research Corporation.

Committee on Youth Employment Programs, Commission on Behavioral and Social Sciences. 1985. *Youth Employment and Training Programs*. Washington, D.C.: National Academy of Sciences.

Dickerson, K. P., T. R. Johnson, and R. W. West. 1984. *An Analysis of the Impact of CETA Programs on Participants' Earnings*. Menlo Park, CA: SRI International.

Farkas, G., D.A. Smith, E. Stromsdorfer, G. Trask, R. Jerrett III. 1982. *Impacts from the Youth Incentive Entitlement Pilot Projects: Participation, Work and Schooling Over the Full Program Period*. New York: Manpower Demonstration Research Corporation.

Grossman, J. B., and B. L. Halpern-Felsher. 1993. *Research Findings on the Effectiveness of Youth Programming: Support for a Developmental Approach*. Philadelphia: Public/Private Ventures.

Hahn, A., et al. 1994. *Evaluation of the Quantum Opportunities Program: Did the Program Work?* Waltham, MA: Brandeis University.

Hayward, B., and G. Tallmadge. 1993. *Evaluation of Dropout Prevention and Reentry Projects in Vocational Education*. Raleigh/Durham, N.C.: Research Triangle Institute.

Heyns, B. 1987. "Schooling and Cognitive Development: Is there a Season for Learning?" *Child Development* 58.

Jastrzab, J., et al. *Evaluation of Youth Corps*. Forthcoming.

Levy, F., and R. Murnane. 1992. "U.S. Earnings Levels and Earnings Inequality: A Review of Recent Trends and Proposed Explanations." *Journal of Economic Literature* 30:1333-1381.

Long, D. A. 1987. "Analyzing Social Program Production: An Assessment of Supported Work for Youths." *The Journal of Human Resources* 22(4).

Long, D. A., C. D. Mallar, and C. V. D. Thornton. 1981. "Evaluating the Benefits and Costs of the Job Corps." *Journal of Policy Analysis and Management* 1(1).

Long, D., R. Wood, and H. Kopp. 1994. *LEAP: The Educational Effects of LEAP and Enhanced Services in Cleveland*. New York: Manpower Demonstration Research Corporation.

Long, D., J. Gueron, R. Wood, R. Fisher, and V. Fellerath. 1996. *LEAP: Three-Year Impacts of Ohio's Welfare Initiative to Improve School Attendance among Teenage Parents*. New York: Manpower Demonstration Research Corporation.

Mallar, C., S. Kerachsky, C. Thornton, and D. Long. 1982. *Project Report: Evaluation of the Economic Impact of the Job Corps Program, Third Follow-Up Report*. Princeton, N.J.: Mathematica Policy Research, Inc.

Maynard, R., W. Nicholson, and A. Rangarajan. 1993. *Breaking the Cycle of Poverty: The Effectiveness of Mandatory Services for Welfare-Dependent Teenage Parents*. Princeton, N.J.: Mathematica Policy Research, Inc.

Manpower Demonstration Research Corporation. 1990. *Summary of Findings of the National Supported Work Demonstration*. New York: MDRC.

National Center for Education Statistics. 1992. *Dropout Rates in the United States*. Washington, DC: U.S. Department of Education.

Polit, D. F., J. C. Quint, and J. A. Riccio. 1988. *The Challenge of Serving Teenage Mothers: Lessons from Project Redirection*. New York: Manpower Demonstration Research Corporation.

Quint, J., D. F. Polit, H. Bos, and G. Cave. 1994. *New Chance: Interim Findings on a Comprehensive Program for Disadvantaged Young Mothers and their Children.* New York: Manpower Demonstration Research Corporation.

Ross, D., et al. 1994. *The Canadian Fact Book on Poverty.* Ottawa: Canadian Council on Social Development.

Stern, D., C. Dayton, I. Paik, and A. Weisberg. 1989. "Benefits and Costs of Dropout Prevention in a Program Combining and Vocational Education: Third-Year Results from Replications of the California Peninsula Academies." *Education Evaluation and Policy Analysis* 11(4): 405-416.

Sykes, C. J. 1995. *Dumbing Down Our Kids.* New York: St. Martin's Press.

Tierney, J. P., and J. B. Grossman. 1995. *Making a Difference: An Impact Study of Big Brothers/Big Sisters.* Philadelphia: Public/Private Ventures.

U.S. Department of Labor , Employment and Training Administration. 1993. *Workplace Literacy and the Nation's Unemployed Workers.* Washington, D.C.: U.S. Department of Labor.

Walker, G., and F. Vilella-Velez. 1992. *Anatomy of a Demonstration: The Summer Training and Education Program from Pilot through Replication and Post-Program Impacts.* Philadelphia: Public/Private Ventures.

Wolf, W., S. Liederman, and R. Voith. 1987. *The California Conservation Corps: An Analysis of Short-Term Impacts on Participants.* Philadelphia: Public/Private Ventures.

Chapter 5

Evidence on the Effectiveness of Youth Labour Market Programs in Australia and the United Kingdom

John A. Burns and Vanessa Thomas
Centre for Public Management

INTRODUCTION

This paper synthesizes available, recent literature on the efficacy of employment interventions targeted at youth in Australia and the United Kingdom. Like other papers in this report, our prime focus is on those studies where a relatively unequivocal attribution of the causal efficacy of the intervention could be reasonably derived – i.e. those with experimental or quasi-experimental[56] designs. Our first step was to identify those studies that should be included in the review[57]. Key informants in the education and employment departments of Australia and the UK were contacted, as were researchers in universities and research institutes. A list of studies to review was drawn up and vetted with key people responsible for evaluations in both countries. Based on these conversations, we feel that we have a reasonably complete list of studies from these two countries that focus on the causal contribution of interventions directed at youth employment. (It should be noted, however, that this approach results in some bias – for example, there are proportionately more studies from Australia, and little evaluative material on some programs, such as Modern Apprenticeships in the United Kingdom.)

Beyond the scope of this review are discussions of macro-economic or socio-political comparisons between countries or across time periods. For the most part, the time frame of the evaluations is the last ten years. We have included evaluations of some programs that were not necessarily targeted at youth but, in general, we have restricted our focus, as much as practical, on their impacts on youth.

1.1*A General Framework to Synthesize Studies to Determine Lessons Learned*

For some time, researchers interested in aggregating intervention efficacy across different studies have used a technique generally labeled meta-evaluation (cf. Mosteller, 1954). This technique has been successfully used in a wide variety of social and

---

[56] We will use the term "quasi-experimental," as opposed to non-experimental, following the general tradition in the social and behavioural science literature.

[57] An earlier draft of this paper attempted to identify relevant studies in other OECD countries, but because of the limited number of quantitative reviews, as well as the significant socio-political differences between countries, this effort was not continued due to the low likelihood of deriving dependable lessons learned.

behavioural science disciplines such as criminology (Losel, 1993) and health (Kavale, 1995), and, we believe, it can form the basis for combining youth employment intervention effects.

Basically, meta-evaluation transforms the findings of individual studies into a common metric (Cochrane, 1957). The approach does not necessarily use the conclusions drawn by the investigator, but rather focuses on the result of the relationship between the intervention and the target group. The approach starts with an estimate of the magnitude of the relationship (the effect size), as well as an indication of the accuracy or reliability of the estimate of the effect size (as in a confidence interval placed around the estimate). For the purposes of this review, for those studies that reported t, F, Z or other measures of association along with their df or N, we first estimated an effect size, then aggregated across studies, weighted by the study's methodological approach.

We are confident that meta-evaluation is the appropriate general approach to determining the "lessons learned" across studies. However, in the case of evaluations of youth employment initiatives in the UK and Australia, the relative paucity of studies employing experimental or even quasi-experimental methods, the small number of replications of interventions of similar enough characteristics, and the heterogeneity of economic and socio-political circumstances across countries and time periods, makes this approach *at this point in time*, just a start in determining reliable lessons learned.

1.2Estimating study quality

There is some debate in the literature concerning the relative merits of experimental and quasi-experimental designs (for example, see Heckman, 1995). We believe the general weight of social and behavioural science supports the superiority of the experimental method over other quasi-experimental methods (see, for example, Boruch, 1994, and other writings by Boruch and others), in large part because the elegance and simplicity of a randomized experiment provides overwhelming advantages compared to statistical corrections. We believe that true experiments are always a worthwhile goal to pursue even in the face of difficult public policy issues.

Meta-evaluation cannot compensate for poor study design. Further, regardless of the initial strength of a design, there are a myriad of threats to study integrity that we will not attempt to review here in detail. In general, we have followed Cook and Campbell, 1979, in trying to estimate the threats to a review's internal, external, construct and statistical validity.

One of the most common threats to a youth employment evaluation study's validity is selection bias – i.e. the bias that occurs when those people who "self-select" into a program or intervention are somehow more able, more interested or otherwise different than those who do not participate – which can result in changes in the dependent variable being incorrectly attributed to the intervention, rather than to the characteristics of those being treated. Experimental, and to some degree quasi-experimental, designs can compensate for these deficiencies.

Other threats to the validity of evaluations can lead a failure to demonstrate effectiveness when, in fact, the program was "successful." These include situations where there was uneven or no effective delivery of the intervention, where there was an unequal dropout rate between treatment and control group members in experimental conditions, where the statistical power of the test was not sufficient to demonstrate statistical significance, where the time period for measuring results was not long enough, or where the evaluation focused only on ultimate outcomes, such as increases in wages or employment, when improvements in intermediate variables, such as increased skills, were achieved.

Finally, other factors can influence the generalizability of the results beyond the experimental setting, such as socio-political and economic determinants.

While it is beyond the scope of this review to include detailed descriptions of such study integrity issues, the above information was included when aggregating the reviewed studies.

1.3EVIDENCE OF IMPACTS ACROSS INTERVENTION TYPES

By examining results across a variety of program interventions, some general lessons begin to emerge. Several evaluations which have used carefully-designed comparison groups (and, in a few cases, randomly-generated control groups) show that participation by young people in labour market programs does have a positive net impact. While it is not possible to compare directly the net impacts across programs, some interventions have demonstrated that they can increase the chance of getting a job by 50 percent; and, even after six to eight months, participants can be more likely than the comparison group to be still employed (Jarvie and McKay, 1993).

A range of interventions have been found to produce some positive effects; however, overall, the employment training programs that have been found to work with youth frequently have the following characteristics.

- They include support services such as job search assistance and counseling. For example, Australia finds that intensified counseling and job search assistance improve the employment probability of the target group, and especially of the long-term unemployed.
- They are careful in the use of wage subsidy programs (i.e. those providing wage subsidies for employers to hire unemployed job seekers). Australia finds low additionality (i.e. whether jobs are created as a result of the program) and high deadweight (i.e. whether participants would have got a job anyway) and high substitution costs (e.g., when a job seeker who attracts a wage subsidy is employed in preference to a job seeker who does not attract the subsidy). Therefore, although the provision of a subsidy may sometimes be helpful as a transition measure, particularly for the most disadvantaged groups, programs

which include subsidies to employers are unlikely to have a positive benefit-cost ratio.

- They attempt to link training with work experience. Australia finds positive outcomes in programs that combine these elements, while training programs by themselves do not produce as many positive outcomes.
- The programs are well managed. The design and delivery of effective employment training programs is a complex business and without early (and continuous) monitoring of the implementation of a program, in terms of how it is being implemented compared to how it was designed, the program may not be found to be effective. (e.g., JobTrain in Australia).
- There is integration of the activities of all the different players involved – unions, employers, trainers/educators and trainees.
- Communication between the parties is well-defined and effective. Because of the jurisdictional problems between levels of government and because of the different concerns and priorities of the various groups, clear role definition and good lines of communication are critical.
- Attention is paid to sub-group variation. While the overall program (for example, one targeted at youth in general) might be effective, there can be significant variations among sub-groups – based on gender, minorities, remote areas, long-term unemployment, and those with varying levels of ability. (e.g., the Youth Training Scheme in the UK).
- There is an emphasis on life-long or continuous learning – adaptability is increasingly being recognized as an important feature in any intervention.

EVIDENCE OF IMPACTS BY TYPE OF INTERVENTION

Broadly, three key forms of assistance can be identified:

- *pre-employment training*, whether remedial and preparatory in nature (e.g., the Special Intervention Program) or vocationally specific (e.g., JobTrain);
- *job search assistance and counseling* encompassing intensive instruction in effective job search techniques (Job Clubs) and also the broader individual assistance strategies (such as Newstart) and case management; and
- *work experience programs*, whether providing a subsidized job (JobStart), work experience as part of training (Modern Apprenticeships, JobSkills, LEAP, NTW) or self-employment assistance (NEIS).

PRE-EMPLOYMENT TRAINING

Evaluations of JobTrain in 1990 and SkillShare in 1991 obtained measures of the net impact of these two programs. The evaluations found the net impact was 11 percentage points for JobTrain and 12 percentage points for SkillShare (implying that participation in these programs increased the probability of getting a job by around 50 percent). The impact of JobTrain was greatest for the long-term unemployed (an increase in job prospects of 79 percent compared to 42 percent for the short-term unemployed). Impact by duration of unemployment at the time of program participation was not available for SkillShare. Jarvie and McKay found that, while training provided through these programs was designed to re-skill the unemployed who had been deskilled by extended periods of unemployment, their "effect appears to be independent of the vocational skills actually acquired. For courses of very short duration it appears that content may not be very significant. Employers in the SkillShare evaluation, for example, reported that the confidence and work habits gained through skills training was probably the most important aspect of the training..., not the skills themselves"[58]

The UK's Employment Training (ET) and Employment Action (EA) evaluations show that ET resulted in a significant impact of getting a job once the program ended, but there was no significant impact from EA. For ET, there was an employment gain of 5 to 10 percent relative to the comparison group for men, and 0 to 5 percent for women in terms of months worked. Participation in ET/EA had no impact on wages, but for those who received classroom training, a significant and positive impact on earnings of about 6 percent was realized.

The Youth Training Scheme (YTS) had anomalous results. The 1991 evaluation found that YTS participants earned less than non-participants. Other studies of YTS (e.g., in 1994) showed that program participation increased the probability of being in work, particularly for young women.

1.4 JOB SEARCH ASSISTANCE AND COUNSELING

The evaluation of the initial NEWSTART strategy, which operated in Australia from 1989 to 1991, reported that intensive interviewing and counseling of the long-term unemployed, in "good" economic times, added about four percentage points to their probability of employment six months after the interview. Interestingly, the overall impact was found to be somewhat greater – about seven percentage points – in "bad" times.

---

[58] Jarvie and McKay, 1993, p. 9.

Australia's job search assistance program, Job Clubs, was found in a 1992 study to have a net impact of 11 percentage points. This study found that 44 percent of job seekers who participated in the program were employed six to eight months after participation, compared to 33 percent of the comparison group who would have found employment anyway. The increase in job prospects was greatest for the very-long-term unemployed, 47 percent compared to 35 percent for those unemployed less than 12 months and 23 percent for those unemployed 12 to 24 months at the time of program participation. The sustainability of this impact and possible substitution effects of the program were not estimated.

The UK did not experience as uniformly positive results. One random assignment evaluation of the Restart program found no significant difference between control and treatment groups in terms of entrance to a stable job; however, another study of Restart found the treatment group had three weeks less unemployment than the control group. The Youth Credits program showed increases in the number of youth combining training and employment, but the overall impact appeared to be more on the quality, rather than the quantity, of training received by youth.

1.5WORK EXPERIENCE PROGRAMS

Work experience programs include a range of interventions, including programs that provide wage subsidies to employers to hire unemployed job seekers, especially those who have been unemployed for long periods (e.g., JobStart); programs that combine work experience and training (e.g., Modern Apprenticeships, JobSkills and the Australian Traineeship System); and schemes which offer support to unemployed people to start up their own businesses (e.g., the New Enterprise Incentive Scheme in the UK).

Apart from estimating the impact of these programs on individuals, ascertaining the extent of effectiveness also requires estimates of whether or not any jobs are created as a result of the program (additionality), whether the participants would have got jobs anyway (deadweight costs), and any substitution effects (for example, when a job seeker who attracts a wage subsidy is employed in preference to a job seeker who does not attract the subsidy). In addition, for programs to assist unemployed persons set up their own businesses, the extent to which businesses established through the program take on extra employees (known as the secondary job creation effect) also needs to be measured.

(a)Wage subsidy programs

JobStart is Australia's main wage subsidy program and, in terms of net impact, it has been Australia's most successful program for the unemployed. A 1989 evaluation of JobStart estimated a net impact of 33 percentage points, while the 1992 evaluation estimated a net impact of 23 points. The 1992 study found that the program's impact was lower for the very-long-term unemployed (the net impact for those unemployed 12 to 24 months was estimated at 24 percentage points, while the impact for participants unemployed more than two years was 15 percentage points).

In 1994, JobStart additionality was conservatively estimated at between 11 and 13 percent.[59] Around 29 percent of vacancies were estimated to have been filled by a JobStart eligible jobseeker rather than an alternative worker (the substitution effect). However, this estimate did not distinguish between additional and non-additional vacancies, and the proportion could be as low as 20 percent when the former are removed. An upper estimate of the deadweight cost (i.e. the full cost less the additionality and substitution proportions) is therefore around 70 percent (which is similar to the deadweight estimated for comparable programs in other countries).

The wage subsidy component of the ET/EA program in the UK showed no impact on wages. Employers participating in the Jobstart program in the UK reported that 69 percent of those employed through the program would have been employed in the absence of a subsidy.

(b)Combining Work Experience and Training

A recent evaluation of the JobSkills program, which offers project-based employment and training for up to six months, found a net impact of 8 percentage points (a 26 percent increase in the probability of being employed).

The impact of the Australian Traineeship System (ATS) on participants' job prospects was not measured in the 1988-92 evaluation because a valid comparison group could not be derived. Nevertheless, information on post-program outcomes was judged to be positive. The majority of trainees (87 percent of those surveyed) were employed 5, 15 and 30 months after participation in their traineeships. The percentage of former trainees who were employed at the time of each survey and who were working for their traineeship employer (the retention rate) fell from 69 percent in the first survey to 50 percent in subsequent surveys. Overall, 51 percent of the trainees who were employed at the time of all three surveys were still working for their traineeship employer.

Like apprenticeships, ATS was directed primarily at young school leavers rather than the long-term unemployed. Better outcomes than other programs are to be expected in light of both this factor and the commitment that the employer makes in taking on a trainee.

Preliminary evaluations of the Modern Apprenticeship program in the UK show success in intermediate outcomes of the program – successful apprenticeship prototypes and "support" for the program on the part of employers and students. Unfortunately, no outcome evaluations of this program were available.

(c)Self-employment assistance

The 1993 evaluation of Australia's New Enterprise Incentive Scheme (NEIS) found that 64 percent of participants were self-employed three months after NEIS assistance ceased, and a further 9 percent were in other paid employment (for an overall

---

[59] See Byrne and Buchanan, 1994.

employment rate of 73 percent). For participants who were surveyed 12 months after ceasing participation in NEIS, 54 percent were self-employed, and a further 9 percent were in other employment. Recent outcomes data from a follow-up survey of program participants show that 74 percent are self-employed three months after leaving the program, with a further 9 percent in other unsubsidized employment. In addition, twelve-month follow-up survey data show that this outcomes level is sustained. It should be noted that the evaluation used a very conservative methodology, which may explain some of the difference between the 1993 and the 1995 outcomes levels.

NEIS appears to be successful in generating employment opportunities. From the evaluation data, for every ten businesses that were still operating three and twelve months after ceasing participation in NEIS, an additional five people, on average, were employed in each business.

While the self-employment results for participants were positive, it should be noted that the new business was not the main source of income for all self-employed participants. Among the self-employed, 71 percent of participants surveyed three months after participation in the program, and 65 percent of those surveyed twelve months after participation, said that the business was their main source of income.

The outcomes of participants who had longer duration of unemployment before participating in the program were less positive than those with shorter duration. The former were more likely to be dependent on income support after participation in NEIS. This suggests that this group, whilst still doing well out of NEIS, may require more specialized assistance.

REFERENCES

Australia

Ainley, J. 1996. "Longitudinal Surveys of Australian Youth." Victoria, Australia: Australian Council for Educational Research, Steering Committee Document.

Beyers, S., and K. Patson. 1992. *Summary of Findings of the Job Club Evaluation*. Canberra: Department of Employment, Education and Training, Evaluation and Monitoring Branch.

BLMR. 1984. "The National Employment and Training Scheme (NEAT): An Evaluation." Monograph Series No. 3. Canberra: Bureau of Labour Market Research.

Budd, N., and M. Cameron. 1994. *Client Surveys Report: National Survey of Client Satisfaction with Youth Access Centres*. Canberra: Department of Employment, Education and Training, Evaluation and Monitoring Branch.

Byrne, A., and K. Buchanan. 1994. *Survey of JobStart Employers*. Canberra: Department of Employment, Education and Training, Evaluation and Monitoring Branch.

Carson, E., and L. Doube. 1994. *National Youth Affairs Research Scheme: Employment Development; Do Young People Benefit?* Melbourne: National Institute for Labour Studies Inc. and The University of Melbourne.

DEET. 1994. *Summary Evaluation of Job Train*. Canberra: Department of Employment, Education and Training, Evaluation and Monitoring Branch.

DEET. 1995. *Department of Employment, Education and Training: Programs 1995-1996*. Canberra: Department of Employment, Education and Training, Evaluation and Monitoring Branch.

DEETYA. 1996. *Working Nation: Evaluation of the Employment, Education and Training Elements*. Canberra: Department of Employment, Education and Training Youth Affairs, Evaluation and Monitoring Branch, Economic Policy Analysis Division.

Grey, K. 1995. *Evaluation of the AVTS Pilot Phase, 1993 and 1994; Training in Transition*. Canberra: Department of Employment, Education and Training, Evaluation and Monitoring Branch.

Jarvie, W., and R. McKay. 1993. "Perspectives on DEET Labour Market Programs." Paper presented to the DEET-CEPR Conference on "Unemployment: Causes, Costs, Solutions." Canberra: Centre for Economic Policy Research, the Australian National University.

Keys Young. 1995. "The Evaluation of the 1993 DEET Youth Grants." Report submitted to the Department of Employment, Education and Training. Unpublished.

Lord, P., D. Roberts, and D. Redway. 1994. *The Land Care and Environment Action Program; Perspectives on Effectiveness*. Canberra: Department of Employment, Education and Training, Evaluation and Monitoring Branch.

Patston, K., P. Gatenby, and D. Trudinger. 1991. *Australian Traineeship System; Interim Report of the Longitudinal Survey of Former Trainees*. Canberra: Department of Employment, Education and Training, Evaluation and Monitoring Branch.

Potterton, P. 1995. *Evaluation of Labour Market Programs: Summary of Findings*. Canberra: Department of Employment, Education and Training, Evaluation and Monitoring Branch.

Purdon Associates PTY Limited. 1993. "Australian Traineeship System Consolidated Evaluations Report." Report submitted to the Department of Employment, Education and Training. Unpublished.

Redway, D. 1996. *Effectiveness of Active Labour Market Programs and Policies in Australia*. Canberra: Department of Employment, Education and Training.

Redway, D., and K. Patston. 1994. *Net Impact Study of Job Clubs*. Canberra: Department of Employment, Education and Training, Evaluation and Monitoring Branch.

Sakkara, M.A., S. Beyers, K. Buchanan, P. Gatenby, and K. Patston. 1993. *Newstart Evaluation: Interim Report on Effectiveness*. Canberra: Department of Employment, Education and Training.

Stretton, A., and B. Chapman. 1990. "An Analysis of Australian Labour Market Programs." Centre For Economic Policy Research Discussion Paper No. 247. Canberra: The Australian National University.

Volker, D. 1993. *Evaluation of SkillShare: The SkillShare Network, An Evaluation*. Canberra: Department of Employment, Education and Training.

Volker, D., and G. Taylor. 1993. *Helping The Longterm Unemployed: Report of Evaluation of the Initial Newstart Strategy*. Canberra: Department of Employment, Education and Training, Economic and Policy Analysis Division.

Waller, V. 1992. *Review of the Interim Coordination Role of Youth Access Centres.* Canberra: Department of Employment, Education and Training, Evaluation and Monitoring Branch.

United Kingdom

Andrews, M. J., S. Bradley, and R. Upward. 1996. *Estimating the Costs and Benefits of Youth Training in the U.K.* Manchester: University of Manchester.

Ashford, S., and J. Gray. 1993a. QQSE Research Group, Division of Education, Sheffield University. *England and Wales Youth Cohort Study: Part-time Participation in Education and Training amongst 16-19-year-olds in the Late 80s.* Sheffield: Employment Department.

Ashford, S., and J. Gray. 1993b. QQSE Research Group, Division of Education, Sheffield University. *England and Wales Youth Cohort Study: The Introduction of GCSE Exams and Changes in post-16 Participation*. Sheffield: Employment Department.

Ashford, S., and J. Gray. 1993c. QQSE Research Group, Division of Education, Sheffield University. *England and Wales Youth Cohort Study: Young People in Training – Towards a National Picture in the Late 80s*. Sheffield: Employment Department.

Coopers & Lybrand. 1994. "The Impact of Youth Credits on the Training Market: Final Report." Report submitted to the Employment Department. Unpublished.

Courtenay, G., and I. McAleese. 1993. QQSE Research Group, Division of Education, Sheffield University. *England and Wales Youth Cohort Study*. Sheffield: Employment Department.

Croxford, L., D. Raffe, and P. Surridge. 1996. "The Impact of Youth Credits: The Round 1 Credit TECs in the First Year of Operation." Edinburgh: Centre for Educational Sociology, University of Edinburgh. Unpublished.

Dolton, P., and D. O'Neill. 1995. "The Restart Effect and the Return to Full-Time Stable Employment." *The Economic Journal* (October): 275-288.

Dolton, P., and D. O'Neill. 1996. "Unemployment Duration and the Restart Effect: Some Experience Evidence." *The Economic Journal* (March): 387-400.

Dolton, P., G. Makepeace, and J. Treble. 1994. "The Youth Training Scheme and the School-To-Work Transition." *Oxford Economic Papers* 46: 629-675.

Ernst and Young. 1995a. "The Evaluation of Modern Apprenticeship Prototypes; Summary and Final Report." Report submitted to the Employment Department. Unpublished.

Ernst and Young. 1995b. "Review of Accelerated Modern Apprenticeships; December 1995, Final Report." Report submitted to the Employment Department. Unpublished.

Jesson, D., and J. Gray. 1994. QQSE Research Group, Division of Education, Sheffield University. *England and Wales Youth Cohort Study: Local Labour Market Variations in post-16 Participation – Evidence from the End of the 80s.* Sheffield: Employment Department.

Park, A. 1994. Social and Community Planning Research, Sheffield University. *England and Wales Youth Cohort Study*. Sheffield: Employment Department.

Payne, J. 1995. *England and Wales Youth Cohort Study*. Sheffield: Department for Education and Employment.

Payne, J., S. Lissenburgh, and M. White. 1996. *Employment Training and Employment Action: An Evaluation by Matched Comparison Method*. Sheffield: Department for Education and Employment.

Whitfield, K., and C. Bourlakis. 1991. "An Empirical Analysis of YTS, Employment and Earnings." *Journal of Economic Studies* 18: 42-56.

General References

Boruch, R. F. 1994. "The Future of Controlled Randomized Experiments: A Briefing." *Evaluation Practise* 15: 265-274.

Cochrane, W. G., and G. M. Cox. 1957. *Experimental Designs*. 2nd edition. New York: John Wiley.

Cook, T. D., and D. T. Campbell. 1979. *Quasi-experimentation. Design and Analysis Issues for Field Settings*. Chicago: Rand-McNally.

Fay, Robert, G. 1996. "Enhancing the Effectiveness of Active Labour Market Policies: Evidence from Programme Evaluation in OECD Countries." Labour Market and Social Policy Occasional Paper No. 18. Paris: Organization for Economic Cooperation and Development.

Glass, G. V. 1976. "Primary, Secondary, and Meta-analysis of Research." *Educational Researcher* 5: 3-8.

Glass, G. V., B. McGaw, and M. L. Smith. 1981. *Meta-Analysis in Social Research.* Beverly Hills, CA: Sage Press.

Kavale, K. A. 1995. "Meta-Analysis at 20: Retrospect and Prospect." In *The Meta-Analytic Revolution in Health Research: Part II.* Thousand Oaks: Sage Press.

Losel, F. 1993. "Evaluating Psychosocial Interventions in Prison and other Penal Contexts." Paper presented to Twentieth Criminological Research Conference. Council of Europe, Brussels.

Mosteller, F. M., and R. R. Bush. 1954. "Selected Quantitative Techniques." In *Handbook of Social Psychology: Vol 1. Theory and Method,* edited by G. Lindzey. Cambridge, MA: Addison-Wesley.

Chapter 6

Lessons Learned on the Effectiveness of Programs and Services for Youth

John Greenwood
Social Research and Demonstration Corporation

INTRODUCTION

Young people entering the labour market have always been at a relative disadvantage. They usually have not acquired much work experience, which makes them relatively less attractive to employers. Many young people themselves choose to go through a period of trying out different jobs before deciding which type of work to concentrate on. This shows up in employment patterns for young people that are relatively less stable (compared, for example, to older workers who are more likely to attach greater importance to job stability). The process of making the initial transition into the labour market can be made even more difficult during periods of weak overall economic conditions, since youth employment (and unemployment) is more cyclically sensitive than that for older workers. Young new entrants to the labour market are the first to be affected by any slowdown in hiring, and young inexperienced workers are most likely to be affected by layoffs that are governed by job seniority.

However, on the positive side, the current generation of young people has, on average, more education than any of its predecessors. Therefore, it should be well-prepared to compete in the labour market and well-equipped to fill the increasing demand for a highly-skilled and adaptable workforce. However, there is widespread public concern that a number of developments – ranging from increased international competition, the emergence of new production technologies, and the adoption of alternative human resource management practices – may be making it more difficult than ever for young people, even those with significant amounts of schooling, to obtain and hold onto employment; and, further, that these trends may be eliminating most job opportunities for those with less than post-secondary education.

This report has tried to identify "lessons learned" about what works in the field of employment-related programs and services for young people. Its purpose is to provide information to policy-makers to help them in the development of any new program initiatives that may be thought necessary to help Canadian youth. Knowing what has been tried and what has worked before, and for whom, may help in designing future interventions. Although the report examines programs not just in Canada, but in the US, Australia and the UK as well, it should be kept in mind that, while international experience may provide some useful pointers for Canadian programs, economic, social,

cultural and other differences between countries may mean that the lessons are not readily transferable.

GENERAL LESSONS

What lessons can be extracted from the review of all this material on Canadian and international experience with youth programs? As a starting point, a number of key overall messages deserve to be highlighted.

1. In Canada, the evidence strongly indicates that labour market success is correlated with educational attainment. Over the past 15 years, high school drop-outs are increasingly worse off; those who have higher degrees are increasingly better-off. Educational attainment is correlated with labour market success because the skills learned in school are vocationally relevant and because the possession of higher degrees implies the possession of other qualities – intelligence, motivation, persistence and the capacity for hard work – that are useful in the labour market. Within the school system, greater effort needs to be placed on providing more clearly articulated pathways in and out of formal education, trying to reduce the stigma attached to vocational training, and providing innovative opportunities for young people to combine work and schooling.

2. Even when programs produce positive results, their impacts are generally modest in size. Therefore, in launching any initiative, it is important not to oversell it. The fact that a program has only a small impact does not necessarily mean that it is not worthwhile. It may still be cost-effective – producing a positive return on the investment of public funds – and may be critical to turning around the lives of particular young people.

3. Young people's needs are many and varied. Therefore, no single intervention can be expected to deal with the full range of problems. Inevitably, a range of programs and services has to be called on; there will not be a single solution. The potential clientele for any program, even one designed with a specified target group – like youth – in mind, faces a wide range of problems and, consequently, they have a wide diversity of needs. This heterogeneity of client needs means that what works for some people will not work for others. In examining program effectiveness, attention needs to be paid to variations among sub-groups – for example, by gender, ethnicity, age, rural or urban location, length of unemployment, educational attainment, and family income. Knowing for which particular groups a program works best allows the program to be more appropriately targeted.

4. Most effective programs for young people provide sustained adult contact. The roles played by adults varies from program to program – teacher, mentor, case manager, counselor, supervisor. The key factors are that there be ongoing contact with an adult over an extended period of time and that it include elements of monitoring, as well as

support. In some cases, the approach adopted has been a nurturing one aimed at supporting the young person's overall development; other programs use "tough love" and stress the penalties associated with failure to meet program requirements. The overall goal is to provide the participants with structure and the motivation to do well.

5. The modest program impacts mentioned above can be the result of two very different targeting strategies. A program can make a modest improvement in the situation of many people whose employment problems are not too serious (and for whom, therefore, the scope for achieving sizable impacts is limited). Or it can try to help the seriously disadvantaged who face multiple barriers to employment. In this case, those who benefit will likely benefit a great deal. But many participants will drop out and many others will not succeed despite the intervention; therefore, the *average* impact will be modest. It is important to decide whether it is more important to provide broad coverage with a program or to provide help to those who need it the most.

6. The most effective strategy for disadvantaged out-of-school youth would be one that is multifaceted – combining a training component with strong links to the employer community, more formal training linked to on-the-job training and work experience, and, for the most disadvantaged, job search assistance and transitional wage subsidies.

7. For young people who do drop out of school, it is important to intervene as soon as possible after school leaving. The later the intervention, the more likely it will be that the self-reinforcing dynamics of low education and few skills, chronic unemployment, poverty, welfare dependency, and declining self-esteem will make the problem almost insurmountable.

8. Better preparation for the labour market increases the probability that young people will obtain and retain employment – but only if jobs exist. Supply-side measures cannot, on their own, solve youth labour market problems. The state of the economy – the availability of jobs – is an important determinant of program effectiveness. Parallel strategies on the demand-side, to ensure the availability of and access to employment opportunities, must be part of any coherent set of labour market policies. In this respect, government needs to engage the private sector in the provision of job opportunities for youth. HRDC's Stay-in-School Initiative provides an example of how a social marketing initiative can increase public awareness and build pressure for change. A similar approach might be part of a larger effort to enlist employers in a youth job opportunity program

In addition to these general comments a number of important lessons can be drawn concerning specific types of interventions.

PROGRAMS FOR IN-SCHOOL YOUTH

School-based programs are an attempt to focus on prevention rather than remediation. The principal source of labour market preparation for young people remains the school system. Young people with more education do better than those with less. Those who drop out without a high school diploma have seen their relative position in the labour market worsen considerably over the past couple of decades. Therefore, the most effective of the strategies reviewed in this report are built around keeping young people in school. In addition, using the mainstream education system as much as possible is more efficient than building alternative program delivery infrastructures to deal with youth after they drop out.

School-based programs aim at keeping students in school and, for those who are not destined for post-secondary education, they try to build bridges to the work world while young people are still in school.

In general, two broad approaches have been used:

- efforts to raise the high school graduation rate by helping students with poor academic performance, and providing alternative curricula (particularly with a labour market focus);

- efforts to provide work experience to students to improve their transitions to work when they leave school

Help with Academic Performance

Poor academic performance has frequently been found to be a predictor of those who are at risk of dropping-out (although it is usually symptomatic of other underlying problems). Programs that help poor-performing at-risk students have been shown to be effective in raising the graduation rate for this group.

Several approaches, with a variety of features, have been used to help students raise their level of academic performance, and many of them have had positive effects on high school graduation rates. However, results have varied considerably among sites. In general, programs that are designed to provide on-going help during the school year – including adult and peer mentoring, help with homework, and offering small stipends for successful participation in school-based programs, sometimes provided in the form of credits that can be used later for post-secondary tuition – have been particularly successful in increasing the graduation rate among disadvantaged youth.

On the other hand, programs that provide remedial academic assistance during the summer have produced short-term gains in terms of helping disadvantaged students keep up and avoid summer learning loss, but they have *not* had much impact on their

graduation rates and on their subsequent employment.

Alternative Work-oriented Curricula

Implementing alternative, labour-market-focused curricula has produced mixed results. These programs have tended to be targeted on disadvantaged and other at-risk populations. They aim to increase student retention by demonstrating the relevance of high school education, particularly to those who may not be destined for post-secondary education or who may wish to continue with a trade or vocational program after high school.

There are no rigorous Canadian studies of the impacts of this approach. Much of the discussion is simply a debate between the proponents of "contextualized" learning and those who ascribe little value to "alternative" curriculum elements based on work experience. In the U.S., there is some evidence that alternative curricula can lead to improved attendance and better grades, but success in raising high school graduation rates has varied considerably from program to program and by geographic location within a program. The inclusion of work elements can either reinforce the value of schooling or it can reinforce the notion of work as a substitute for school. The American evidence also suggests that these approaches are more successful with young women; while among young men, particularly blacks, the involvement in work-related activities may actually increase their likelihood of dropping-out of high school to work full-time if a job becomes available.

School-to-work Transition Programs

In Canada, experience is based on specific transition programs, usually small in scale compared to the mainstream school programs alongside of which they operate, and usually targeted on a specific student population (typically at-risk or under-achieving students).

In Europe, there are many more examples of how basic education and vocational preparation can be combined in the education system. Two broad approaches are exemplified by the dual system in Germany, in which young people are streamed at an early age into enterprise-based vocational training operated in conjunction with and integral to their basic schooling, and by the National Vocational Qualifications approach in the UK, whereby the private sector establishes, within a framework set by government, a series of competency standards for each occupation, but it is left up to the individual to decide how they want to go about acquiring the skills necessary for occupational entry (e.g., in school, through on-the-job training, from private training providers).

It is important to keep in mind that national education and training systems reflect the broader institutional environment within which they operate. Consequently, approaches used in one country may not be readily transferable to another. In addition, elements of alternative systems, such the development and maintenance of a

comprehensive set national competency standards, the accreditation of training institutions, and the testing of competencies, can be quite costly.

Canadian transition programs aim at developing stronger connections between schools and the workplace. The most common examples are cooperative education programs and in-school apprenticeship programs. The evidence suggests that the effectiveness of such programs, at both the secondary and post-secondary levels, in significantly affecting the employment and earnings of graduates depends on the quality of the job experiences that are provided. The key is to provide young people with experiences which will be valued in the full-time labour market. In particular, there is no substitute for actual paid work experience in the private sector.

Programs that link school and work experience face significant barriers to expansion. Many educators in North America downplay the role of the education system in providing vocational preparation and, consequently, they are reluctant to develop opportunities for and to give academic credit for work experience. Also, the number of work experience places offered by employers is quite limited.

In addition, the results of these programs has been mixed. There is some evidence that cooperative education leads to improved employment outcomes for those in post-secondary education. But the (albeit more limited) experience with cooperative education in high schools provides no evidence of any significant impact on drop-out rates or later employment experiences.

An alternative approach to providing students with work experience is to improve their access to summer jobs. There is some evidence that targeted summer jobs programs do not simply attract those who would have found jobs anyway but can increase the number of disadvantaged young people who obtain employment. However, while there is general evidence that work experience is an important determinant of later employment success, little is known about whether summer jobs have any impact on the academic achievement or subsequent employment experiences of participants.

Finally, there is no evidence that placement services that are set up to cater specifically to the needs of students (e.g., Human Resources Centres of Canada for Students or HRCCs on Campus) are any more effective (or any less effective) than regular placement services in helping students find jobs, or in reducing the time they take to find jobs, or improving the kinds of jobs and earnings they obtain.

PROGRAMS FOR OUT-OF-SCHOOL YOUTH

Helping disadvantaged young people in not easy, and it is even more difficult once they have dropped out of school. In the US, in particular, youth programs have been predominately focused on young people with serious social problems – young people involved with the criminal justice system, youths drawn from racial minority groups in inner-city areas, unmarried teen mothers. The success rate of these programs has not been high, and where programs (such as the LEAP and TPD programs discussed by Long) have been offered to both in-school and out-of-school youth, the results have been much poorer with those who had already left school.

Some interventions have had modest success – but they have usually been intensive and expensive. The best-known American example is Job Corps which provides a relatively lengthy period of training, combined with opportunities to acquire on-the-job work experience, and the provision of job search help. Other cheaper and less intensive programs have had little or no impact in the US. It is also clear that the earlier an intervention occurs, the better. The dynamics of low education and skills, chronic unemployment, poverty, welfare dependency, and declining self-esteem are self-reinforcing. After a while, the problems become almost insurmountable.

Canadian programs for out-of-school youth generally have not focused on a severely-disadvantaged clientele. One Canadian example of a program that *was* targeted on a more disadvantaged group of clients was the Severely Employment Disadvantaged Option of the Job Development Program (although SED was not specifically a youth program). SED was found to have a small but positive short-run impact on participants' employability, but the impact dissipated over the longer run; and SED produced no gains in participants' earnings.

The Entry Option was the component of the HRDC's former Job Entry program that was predominately focused on youth and it *did* produce significant short-run gains in employment and earnings, although these gains were found to erode over time. Overall, however, Entry participants could best be described as mildly disadvantaged. Only a small proportion of participants came from minority groups, relatively few had an attachment to the welfare system, and half of all participants studied were in Ontario and British Columbia – the most buoyant and diversified of provincial labour markets.

It is in large part because of these disappointing results that there has been a renewed interest in prevention, using school-based programs, rather than relying on remedial approaches to helping disadvantaged youth.

Once young people have left school, there are six general approaches (as opposed to specific programs) that have been used to help them overcome their employment-related problems:

- help in finding a job,
- projects to provide periods of temporary work experience,
- wage subsidies to encourage hiring by employers,
- supports to self-employment,
- training, and
- encouragement to return to school.

Job Search Assistance

Job finding help is offered in a variety of forms – vocational counseling, training in job search skills, resumé writing, job finding clubs. These programs *do* seem to be able to accelerate the process of finding a job. However, they do not seem to be able to produce lasting gains in terms of employment and earnings. Most commonly, increases in earnings erode quite quickly; after one to two years, participants' earnings are no higher than those for non-participants. This is not surprising; job finding help alone does not do anything to better equip people to participate and advance in the labour market.

However, these programs are relatively inexpensive to operate, and they are usually found to be cost-effective since even modest benefits offset their costs.

Work Experience (Job Creation) Projects

These types of programs typically provide temporary periods of work experience, usually in the public or non-profit sectors, and usually providing a top-up payment to a participant's benefit entitlement (welfare or UI) in lieu of a wage.

These programs have produced generally disappointing results. For example, the General Projects option of HRDC's former Job Development Program had no impact on participants' earnings and a slight negative effect on their employability. Evaluations of American programs have observed short-term effects but without any longer-term improvement in employment and earnings. Participants have higher earnings while taking part in the program; however, they seem to have no greater success than non-participants in finding and keeping work later on. An Australian program was found to have a slight positive effect on participants' employment, mainly among the long-term unemployed.

Previously, most European countries provided some sort of direct job creation program, usually relying on jobs in the public sector. However, most of these programs have now been abandoned as costly and ineffective.

Wage Subsidy Programs

Targeted wage subsidy programs pay employers to hire members of a particular target group. The characteristics of programs can vary widely (lump-sum payments, flat-rate and graduated rates of wage reimbursement, front-end and back-end loaded subsidies, bonuses linked to the provision of on-the-job training).

Australia and several European countries provide temporary wage subsidies to employers. These are not strictly youth programs; for the most part, they are targeted on the long-term unemployed. Evaluations of these programs suggest that wage subsidies can increase the probability that disadvantaged people will be hired to fill available jobs. And, in Canada, the recent evaluation of the Job Opportunities option of the Employability Improvement Program estimated relatively large positive impacts on participants' employment and earnings. Similarly, evaluations of former training programs, such as the Critical Trade Skills Training Program and the Workplace-Based Training option of the Skill Shortages Program, found that wage subsidies offered as an incentive to provide training can lead to gains in the productivity and earnings of participants.

On the other hand, there is little evidence that wage subsidy programs increase the number of jobs available. The OECD has estimated that only about one job in five is created as a result of the subsidy. In the other cases, employers would have hired someone anyway. Therefore, those who are hired will, for the most part, simply displace others who would have been hired without the program, and the positive effects of the program will be offset by the losses experienced by those who are displaced by program participants. However, these programs do give an advantage to those who are eligible to have their wages subsidized compared to other job seekers, and such a redistribution of job opportunities may be justified on equity grounds. Disadvantaged people can be provided a chance to gain work experience, keep a connection to the labour market and share in the benefits associated with paid employment. Of course, this is only true to the extent that the people who are displaced are not themselves members of disadvantaged groups.

Self-employment Assistance

The Self-Employment Assistance (SEA) program in Canada, Australia's New Enterprise Incentive Scheme, as well as programs in several European countries, are designed to help unemployed people start their own business. These programs are typically run as extensions of the Unemployment Insurance systems.

Qualitative studies have pointed out the importance of combining financial assistance with other types of support, such as management training and business planning help. There has not been much rigorous quantitative analysis of impacts. However, businesses started through these programs have generally had survival rates that are in line with other new business start-ups, and a UK study estimated that about one in four successful starts under the Enterprise Allowance Scheme would not have started without support from their program.

A recently-completed evaluation of SEA in Canada indicates that, at least in the short term (program participants were followed up, on average, eight months after completing SEA), participants were more likely to be self-employed and SEA produced positive impacts in terms of higher incomes and reduced receipt of UI and SA benefits. Although a portion of the SEA budget is set aside to assist young people, separate program impacts on youth participants are not available.

The limited Canadian experience with Student Business Loans suggests that a selectively applied program, operated in cooperation with the private sector, can stimulate young people's interest in entrepreneurial activities, and can encourage self-employment on the part of students (particularly high school students) as an alternative to more traditional summer or part-time jobs.

Training Programs

The evidence suggests that well-designed training programs can make a difference. However, the increases in the employment and earnings of trainees will likely be modest, particularly for young men and particularly for the disadvantaged. Also, training is much more effective when it is combined with other services, such as job search help and work experience opportunities.

It should be noted that the paucity of evidence for substantial long-term effects from most training programs is partly a reflection of the relatively short time periods over which the programs have been evaluated. The benefits from training take time to appear and may accrue slowly. In particular, unless there are large earnings differences between those who take training and those who do not, it may take a considerable period of time for earnings gains to offset the opportunity costs associated with staying out of the labour market to complete a training program. Without a sufficiently long follow-up period, such programs are unlikely to be found cost-effective.

Training programs that focus on a disadvantaged clientele, particularly on young men who leave high school prior to graduation, have also been characterized by high drop-out rates. Therefore, the rather disappointing results from these programs may, to some extent, be a reflection of incomplete exposure to the program, rather than the ineffectiveness of the training itself.

The most successful training programs for disadvantaged young people have tended to be those that are relatively intensive and provide support services in conjunction with the training. Many programs complement training with counseling, job search assistance and similar services. In such cases, it is often difficult to isolate the impact of the training itself.

An example of one of the most successful intensive mixed-services programs for disadvantaged young people is the previously-mentioned Job Corps in the US – a relatively lengthy residential program providing basic education, vocational skills and a wide range of support services. Job Corps has been found to lead not only to an increased rate of high school graduation and a reduction in involvement in crime, but has also produced modest increases in employment and earnings and decreases in transfer payments (UI and welfare) to participants. Despite its high cost per participants, Job Corps was also found to be cost-effective in terms of producing benefits to society in excess of costs, particularly when the savings associated with the reduction in serious crimes is taken into account.

However, because these successful models are expensive and complicated to operate, they will always be limited to helping relatively small numbers of people.

In the few cases where shorter-term, less-intensive programs have had some success, they have usually been based on a "work first" approach. The "work first" approach can be characterized as one which maintains a strong focus on jobs. Such programs, for example, emphasize on-the-job training, job search skills, and strong links to local employers. One of the most successful, and best-known, examples is the Center for Employment and Training (CET) in San Jose, California, which operated under the Jobstart program and provided one of the shortest and cheapest training interventions of any site within Jobstart. However, the key factor seems to be a knowledge of, and a connection to, the local labour market. CET has a very strong – almost single-minded – focus on getting participants into jobs. The program maintained close connections to the labour market, including the use of industry advisory boards and recruiting program staff with good labour market knowledge and employer connections. Academic upgrading was combined with vocational skills training and both were provided using contextualized approaches to learning. Curricula were individually tailored, and the training programs were designed to permit open entry and exit to get participants into a job at the first opportunity. Alberta recently began testing the CET model at four pilot Integrated Training Centres.

Not surprisingly, training programs are most likely to be successful when they are focused on skills in demand. The positive evaluation results from the Skill Shortages Program demonstrate that a tight focus on training in occupations in demand can substantially raise the impact of a training program.

Admittedly, this is not easy to do. Skill needs can change rapidly over time, so it may be difficult to anticipate requirements with any degree of precision where lengthy

training periods are involved. Occupations in demand also vary from place to place. This may be particularly important in the initial job experiences of young people, who may not be very mobile due to family ties or financial constraints. It may be that the key strength of the CET model is the strong link to the local labour market that allows program administrators to identify and train for skills in demand locally. This would be especially important if local employers use these programs as a method to screen for new workers. Finally, the nature of skills in demand may be changing. Employers are describing their needs less in terms of specific occupational skills and more in terms of generic skills – communications, teamwork, problem-solving – that help ensure a flexible and adaptable workforce.

Return to School

Given the importance of education to employability and lifetime earnings, an obvious strategy for helping high school drop-outs is to help them go back to school. Most provincial education departments and school boards offer some form of adult high school or alternative school for those who left high school without graduating. However, evaluation studies of these approaches are not available. Evidence from the U.S. indicates that academic upgrading on its own produces little in the way of employment and earnings gains. The key here, however, is that a high school diploma provides additional options. For example, if academic upgrading is a prerequisite for, and is offered in conjunction with, skill training then positive results can result. And, of course, it permits entry to post-secondary education which *does* produce significant impacts on subsequent employment and earnings.

A more recent approach is the use of vouchers to provide access to educational opportunities, and, in particular, to encourage young people to pursue post-secondary studies. For example, a recently-completed evaluation of a project in Newfoundland (the Student Work and Service Program) suggests that tuition vouchers that were given in return for participation in work experience projects had a significant effect on increasing the number of social assistance recipients (SARs) who decided to go on to post-secondary education after taking part in the program. On the other hand, vouchers had little impact on the decisions of non-SAR participants (the vast majority who pursued post-secondary studies would have done so without the voucher). This would seem to argue for careful targeting of such programs.

A similar program of somewhat longer standing is the Youth Credits program in the United Kingdom. This program is currently moving to full implementation following a pilot phase. Unfortunately, no quantitative impact evaluation has been conducted. Case study evidence suggests that vouchers may have provided greater access to further education to some disadvantaged youth. However, there is no evidence that it has had any effect on the training choices that young people make or on the types of training offered by training providers.

PROGRAM IMPLEMENTATION AND EVALUATION

To this point, we have been summarizing "lessons learned" on the effectiveness of various programs and services. However, the confidence with which we assert that this or that program "works" ought to be related to our confidence in the methodology that underlies the empirical evaluation results. This final section discusses some of the methodological challenges that face researchers in this area.

The evidence from evaluation studies suggests that putting effective programs in place is not easy. The variation in impacts across similar programs that have been implemented in different places and at different times indicates that programs are not easy to set up, operate and maintain over time. A good program design is not, on its own, any guarantee of success. It is important that sufficient time and resources be allowed to plan program implementation, to develop operational procedures, to train staff, and to work out initial start-up problems prior to full implementation. Well-trained and motivated staff, effective program management, and early and continuous monitoring of program implementation and operation are all crucial to program success.

The variability of results may also reflect differences in economic environments.[60] A program may be a success in one labour market context but a failure in another. Therefore, an evaluation of a program, such as a training program in specialized skills whose impact in terms of participants' post-program earnings and employment depends on whether vacancies exist for those particular skills, may generate a fundamentally different answer if it is conducted during a period of high unemployment, rather than in a tight labour market. Both the benefits and costs of a program intervention can vary with labour market conditions. Participants' opportunity costs, the extent to which participants drop out of a program, the wages and hours of work obtained after participation, and displacement effects may vary systematically with the tightness of the labour market, and all these factors will affect the social benefit-cost analysis of a program.

Conducting research to determine what works with any degree of confidence is not an easy matter. Well-designed program evaluations require the collection of a great deal of information over a considerable period of time. Constraints in terms of time, money and data availability can result in program impact evaluations that are weaker than one would like to see. Canada ranks very high in any international comparison of evaluation efforts. In the area of employment-related programs, HRDC's evaluations are second only to those in the United States in terms of the rigour of their methodologies and the reliability of their findings.

Nevertheless, the difficulty in effectively evaluating fully-operating programs argues for greater use of experiments and demonstration projects to try out new ideas

---

[60] I thank Lars Osberg for making this point in his comments on an earlier draft of this summary.

before they are implemented on a broad scale. HRDC's Strategic Initiatives is an example of this approach. However, it is still important to take the time to assess how new initiatives are performing. Otherwise, pressure to move to large-scale implementation as quickly as possible may lead to hasty, and incorrect, assessments.